
CYPRESS

GENERAL PLAN

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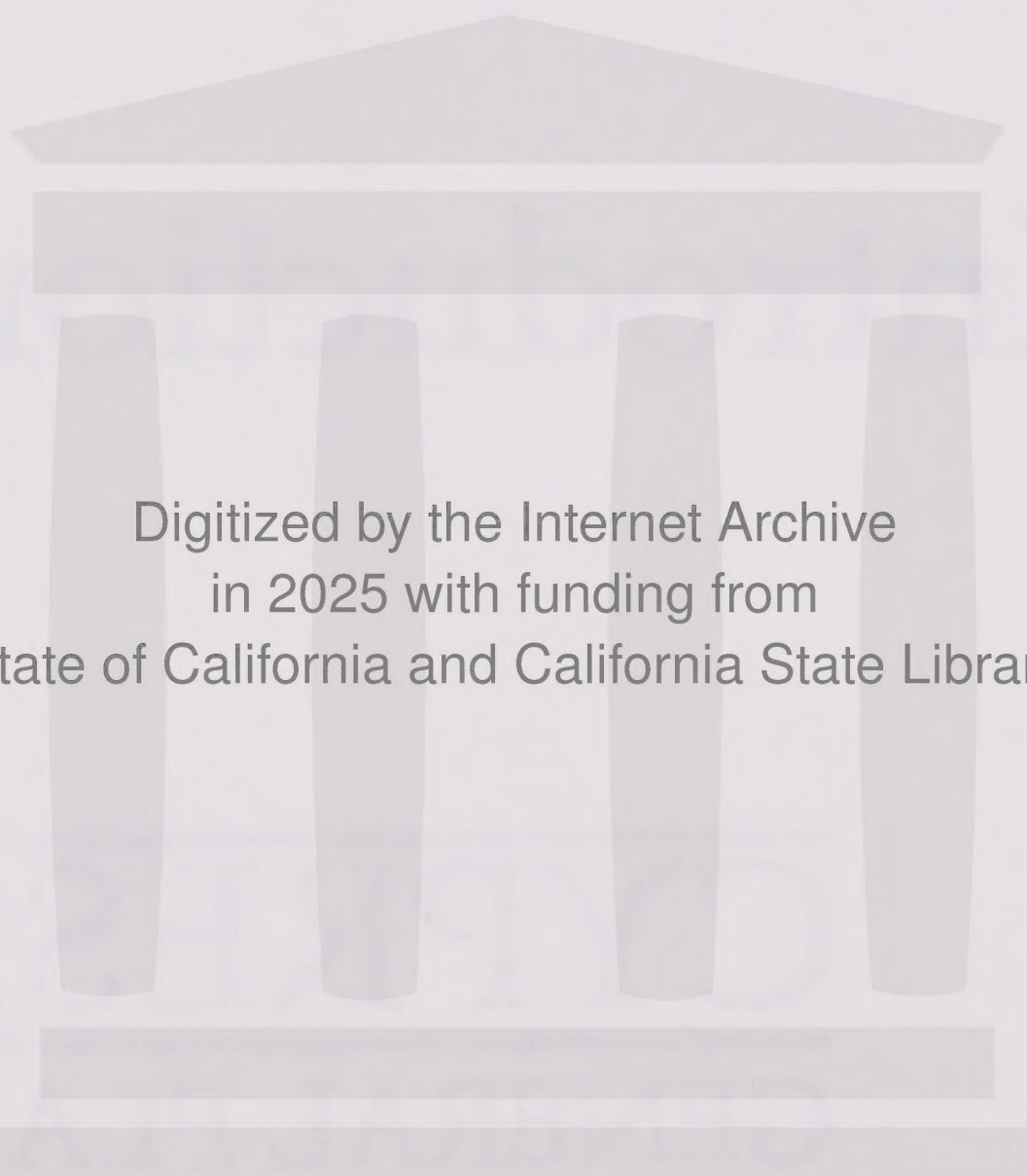
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Introduction

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CITY OF CYPRESS

GENERAL PLAN

INTRODUCTION

FEBRUARY, 1993

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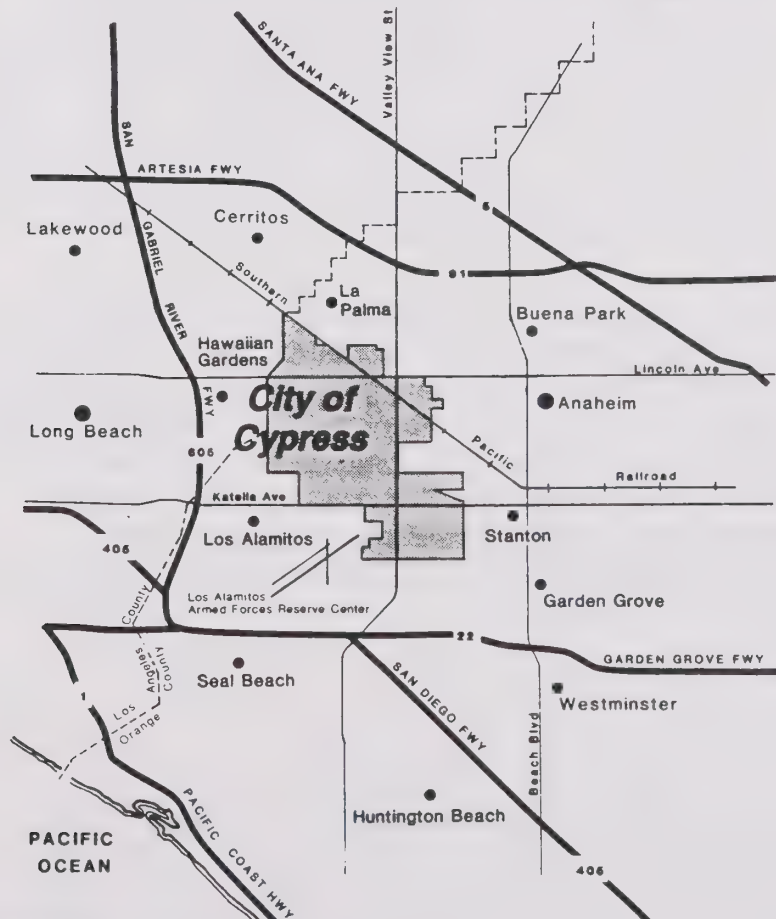
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INTRODUCTION TO THE GENERAL PLAN

Cypress lies in the northwestern portion of Orange County and is part of the larger Southern California region. The cities which border Cypress include La Palma, Buena Park, Anaheim, Stanton, Garden Grove, Los Alamitos, Long Beach, Hawaiian Gardens, Lakewood, and Cerritos. The entire region has witnessed an unprecedented population and economic growth during the past 40 years. As a result, Cypress and surrounding jurisdictions are located in an urbanized environment with limited amounts of vacant land remaining.

Development began in Cypress as the agricultural and vacant land surrounding Los Angeles was developed with residential, commercial, and industrial uses. The agricultural uses, originally adjacent to Los Angeles, moved to Cypress to join the thriving dairy business. The City of Cypress incorporated as a dairy community in 1956, and transformed into a suburban city during the 1960s and 1970s as housing demands increased in the region and agricultural uses were forced to outlying areas.



THE FUTURE OF CYPRESS

The future of Cypress, like that of all cities, will be the cumulative result of past and current decision making by those who have a local role in the development process, such as residents, property and business owners, elected officials and staff. The General Plan serves as a tool and frame of reference for use by City officials and citizens, as well as other public agencies to make these decisions. As Cypress approaches build-out, the Land Use Plan focuses on preserving residential neighborhoods, guiding the remaining development opportunities, and encouraging the revitalization of selected areas.

Single-family neighborhoods will continue to be preserved, while the intensification of some multiple-family residential areas will provide additional housing opportunities for Cypress' residents. The rural character of the existing single-family large-lot neighborhoods will be maintained by continuing to allow equestrian facilities and animals in these select areas.

The remaining vacant parcels of land in Cypress are concentrated in the southern portion of the community and are slated for business park development. The Land Use Plan supports the continued development of the Cypress Business Park which has witnessed substantial growth during the past decade. The City will continue to review future developments on a project-by-project basis.

The Land Use Plan contains policies and programs that are intended to improve the quality and vitality of development in Cypress, particularly along Lincoln Avenue. Lincoln Avenue's fragmented land use pattern will be improved by encouraging the creation of development activity nodes, and encouraging the location of certain desirable land uses currently unavailable in northern Cypress, such as entertainment/theatres, full service restaurants, and large scale retail.

PUBLIC PARTICIPATION

The public plays an important role in both the preparation and implementation phases of the General Plan. Because the General Plan reflects community goals and objectives, citizens must be involved with issues identification and goals formulation. The Cypress General Plan update involved an extensive community participation program which formed the basis of the Plan's policy direction.

The City initiated the General Plan program by conducting a Citywide survey to assess community attitudes and concerns. The survey was distributed to a random selection of 2,800 Cypress households. The City received 837 completed surveys, representing a 30 percent rate of response. With response rates of 15 to 20 percent characteristic of similar mail surveys, the high level of response to the Cypress survey demonstrates significant community interest and commitment.

The results of the survey provided information on the relative significance of specific planning issues in Cypress and served as the basis for formulating General Plan goals, policies, and programs to address these issues. An abbreviated summary of the survey is provided in Table I-1. The complete General Plan Survey Report is available for review at the City's Planning Department.

In addition to the community survey, City staff and consultants conducted numerous meetings over a period of several months with six separate Citizen Advisory committees. Each Committee was assigned to evaluate land use issues in a specific study area in Cypress, and to develop General Plan land use recommendations for that area. A detailed description of the study areas and the Committee's recommendations is included in the Land Use Element. The City solicited applications Citywide for participation on the Committees, and was successful in assembling a diverse group of 30 residents and business persons; a list of Committee participants is included in the introductory pages of the General Plan.

**TABLE I-1
SUMMARY OF GENERAL PLAN SURVEY**

ISSUE AREA	COMMUNITY COMMENT	AVERAGE RATING ⁽¹⁾
Benefits of living or locating a Business in Cypress	<ul style="list-style-type: none"> ◦ Low crime rate/safe neighborhoods ◦ "Friendly" small town atmosphere ◦ Community image ◦ Quality of schools ◦ Clean physical environment (air, water, open space) ◦ Quality of services ◦ Proximity to work ◦ Recreational opportunities ◦ Affordability of housing 	1.93 2.05 2.07 2.08 2.12 2.14 2.17 2.49 2.98
Important Land Use Issues	<ul style="list-style-type: none"> ◦ Future use of Race Track & Cypress Golf Course ◦ Development standards in Business Park ◦ Housing density ◦ Quality of retail commercial development ◦ Upgrading of development along Lincoln Avenue ◦ Quantity of retail commercial development ◦ Future development in Crescent/Lincoln annexation area ◦ Future residential zoning of DeLong Street ◦ Redevelopment of Civic Center Area ◦ Lack of regional shopping 	1.75 1.84 1.94 2.11 2.16 2.50 2.63 2.76 2.94 3.22
Level of Importance of Other Issues	<ul style="list-style-type: none"> ◦ Police protection ◦ Fire and rescue response ◦ Traffic congestion ◦ Quality of neighborhood appearance ◦ Condition of public streets and facilities ◦ Growth control ◦ Standards of new development ◦ Drug education ◦ Traffic noise ◦ City beautification ◦ Cost of local government ◦ Public park facilities ◦ Nuisance noise (parties, loud radios, barking dogs, etc.) ◦ Health/hospital facilities ◦ Senior citizen housing ◦ Affordable housing opportunities ◦ City recreation programs ◦ Move-up housing opportunities ◦ Need for local jobs ◦ Public transportation 	1.26 1.28 1.43 1.46 1.56 1.64 1.73 1.74 1.81 1.95 2.06 2.13 2.17 2.19 2.32 2.41 2.44 2.56 2.64 2.67

(1) Ratings range from 1 = "very important", 5 = "not important".

Based on the magnitude of change recommended for the Lincoln Avenue study area, combined with recent community involvement in the area related to adoption of the Lincoln Avenue Redevelopment Project, a special town hall meeting was conducted to discuss the Committee's recommendations for this area. Business and property owners along Lincoln Avenue were notified of the meeting, and a significant contingent of over thirty individuals attended the meeting and shared their views. Community participants overwhelmingly agreed Lincoln Avenue was in need of revitalization, and were interested in the role the General Plan could play in facilitating this change.

A series of study sessions were also conducted with the Cypress City Council to receive input at key stages in the planning program. At the culmination of the Citizen Advisory Committee meetings, each of the six committees presented their recommendations to Council in a public study session. City staff and the consultant conducted several additional study sessions to review preliminary policy direction prior to incorporation into the General Plan. The Council also had an opportunity to review and comment on the Draft General Plan prior to conducting public hearings on the document.

Copies of the public hearing Draft General Plan were distributed to interested agencies and individuals, and copies were available for review or purchase at City Hall. The Draft General Plan underwent additional review at public hearings held before the City Council.

PURPOSE OF THE GENERAL PLAN

State law requires each city and county to adopt a comprehensive, long-term general plan for its own physical development. In essence, a city's general plan serves as the blueprint for future growth and development. As a blueprint for the future, the plan must contain policies and programs designed to provide decision makers with a solid basis for land use related decisions.

The general plan must address many issues which are directly related to and influence land use decisions. In addition to land use, State law requires that the plan address circulation, housing, the conservation of natural resources, preservation of

open space, the noise environment, and the protection of the public safety. These issues are to be discussed to the extent that they apply to a particular jurisdiction. The general plan may also cover topics of special or unique interest to a city or county, such as the recreational resources.

ORGANIZATION OF THE GENERAL PLAN

Government Code (Section 65402) requires that a general plan contain seven elements, or chapters: 1) Land Use, 2) Circulation, 3) Housing, 4) Conservation, 5) Open Space, 6) Noise, and 7) Safety. In addition to the required elements, State law allows optional elements which address specific issue areas within a jurisdiction.

The City of Cypress General Plan contains the required elements and three optional elements: Recreation, Air Quality, and Growth Management. Conservation, Open Space, and Recreation are combined into one element. All of these elements, or chapters, are included in this document except for the Housing Element. The Housing Element was recently updated (1990) prior to the General Plan program due to the five year update cycle mandated for this Element. The City's Housing Element received approval by the State Department of Housing and Community Development and will be updated again in 1994.

The relationship between the Cypress General Plan's eight elements and the seven State-mandated elements is illustrated in Table I-2.

Approach to General Plan Organization

The Cypress General Plan consists of text and maps which provide direction for the City's growth and development. A number of studies and background information were prepared to develop the general plan's goals, policies, and programs. Technical studies for traffic and archaeological resources were completed as part of the general plan update. The information provided in these two technical reports and additional data presented in each element, created the basis for the General Plan update.

**TABLE I-2
RELATIONSHIP OF GENERAL PLAN ELEMENTS
TO STATE-MANDATED ELEMENTS**

CYPRESS GENERAL PLAN ELEMENTS	STATE-MANDATED GENERAL PLAN ELEMENTS							OPTIONAL
	LAND USE	CIRCULATION	HOUSING	CONSERVATION	OPEN SPACE	SAFETY	NOISE	
Land Use	X							
Circulation		X						
Housing (Adopted separately)			X					
Conservation/Open Space/ Recreation				X	X			X
Safety						X		
Noise							X	
Air Quality								X
Growth Management								X

In addition, a General Plan Environmental Impact Report (EIR) was prepared. The EIR analyzes the potential environmental impacts of the policies and programs contained in the General Plan.

Element Organization

Each of the eight General Plan elements is comprised of five sections -- the Introduction, Existing Characteristics, Issues Identifications, the Goals and Policies, and the Plan. The Introduction describes the purpose and focus of the element and also introduces other plans and programs outside of the General Plan which may be used to achieve specific General Plan goals.

The Existing Characteristics section inventories resources, opportunities, and constraints that influence development, residents and workers in Cypress. This information is directly incorporated into the Issue Identification section which pinpoints issues that will be addressed in the Plan. (The Issue Identification section in the Land Use Element differs slightly from other elements and is entitled Land Use Issues and Recommendations).

The Goals and Policies section presents the City's long-term objectives for the subject area of each element. The goals and policies are arranged by issue or subject, and a brief description of philosophy or basis behind those objectives precedes each group of goals and policies.

For general reference, goals and policies may be defined as follows:

GOAL: A goal is a broad statement of purpose and/or direction.

Policy: A policy describes a more definitive course of action supporting the achievement of a goal.

The fifth and final section of each element consists of the "plan", or the further definition of programs to be pursued to implement General Plan policy. For example, the Land Use Element contains a "Land Use Plan" which indicates the types and intensities of land use permitted city-wide. The "Circulation Plan" in the Circulation Element includes a Master Circulation Plan showing existing streets and intersections to be improved and new infrastructure provided to meet the circulation needs of City residents and those employed in or visiting the City. Whenever possible, each element contains maps, diagrams and tables to illustrate General Plan policy.

CYPRESS



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Land Use

Element

CYPRESS

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CITY OF CYPRESS

GENERAL PLAN

LAND USE ELEMENT

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INTRODUCTION

Cypress began as a small dairy community established as a result of the inception of Pacific Electric's Santa Ana rail line in 1903. Soon after the City's incorporation in 1956, Cypress began a period of rapid single-family subdivision. The master-planned Cypress Business Park began to flourish in the 1980s, providing significant employment opportunities for the City's 40,000 plus residents. An extensive parks and recreation system has been developed to serve City residents and workers, contributing to the well-balanced community Cypress has become.

As Cypress continues to mature, this Land Use Element will serve as the long-range guide to the development and utilization of lands within the community. Ultimately, the Land Use Element provides the foundation for land use decision making regarding the City's long-term physical development.

PURPOSE

The Land Use Element and the Land Use Policy Map represent the two most important components of the General Plan. Together, these two parts of the Plan establish the overall policy direction for land use planning decisions in the City. The Land Use Policy Map displays graphically the location and distribution of land use in Cypress, whereas the element text describes the form these uses will take, as well as the programs the City will pursue to implement the land use goals.

Goals and policies set forth in the Land Use Element shape and reflect the policies and programs contained in the other General Plan elements. For example, the street system and circulation improvements described in the Circulation Element are designed to accommodate the intensity of use allowed by land use policy. Housing Element programs focus on neighborhood stabilization and rehabilitation of housing units.

RELATED PLANS AND PROGRAMS

Due to the comprehensive nature of the Land Use Element, land use issues are not addressed in the same detail as they might be in certain physical planning documents, plans, and ordinances the City can adopt. The land use categories described in the Land Use Plan section of this element indicate general categories of permissible uses and development intensities allowed within each category. Other documents, including the zoning ordinance, specific plans, and redevelopment plans, establish more specific regulations and policies influencing development.

In addition to many of these locally adopted plans, ordinances, and regulations that concentrate on issues confronting an individual jurisdiction, a number of regional plans affect the City. Regional planning agencies such as the Southern California Association of Governments (SCAG) recognize that planning issues extend beyond the boundaries of individual cities. Efforts to address regional planning issues such as affordable housing, transportation, and air pollution have resulted in the adoption of regional plans which affect Cypress. Relevant regional plans are discussed briefly in the following paragraphs to indicate the relationship of the plans to this General Plan.

City of Cypress Zoning Ordinance

The City's adopted Zoning Ordinance establishes districts within Cypress in which specific regulations apply, such as density, height, size, and development character. The Ordinance consists of two primary parts: a map which delineates the boundaries of districts; and text which explains the purpose of the district, specifies permitted and conditional uses, and establishes development and performance standards.

As a charter city, Cypress has no explicit requirement to ensure that its legislative enactments, including zoning, are consistent with the general plan. However, in the interest of sound planning, Cypress will make every effort to ensure consistency. Each of Cypress' general plan land use categories corresponds to one or more zoning categories. The Land Use Element explains the relationship between the zoning and

general plan land use categories. (Table LU-3 under the Land Use Designations section illustrates the relationship).

Cypress periodically amends sections of the Zoning Ordinance and map to reflect changing conditions. For example, new development regulations outlined in specific plans are incorporated into the Zoning Ordinance. Amendments to the Zoning Ordinance allow the document to maintain consistency with other plans which influence development in Cypress.

Specific Plans

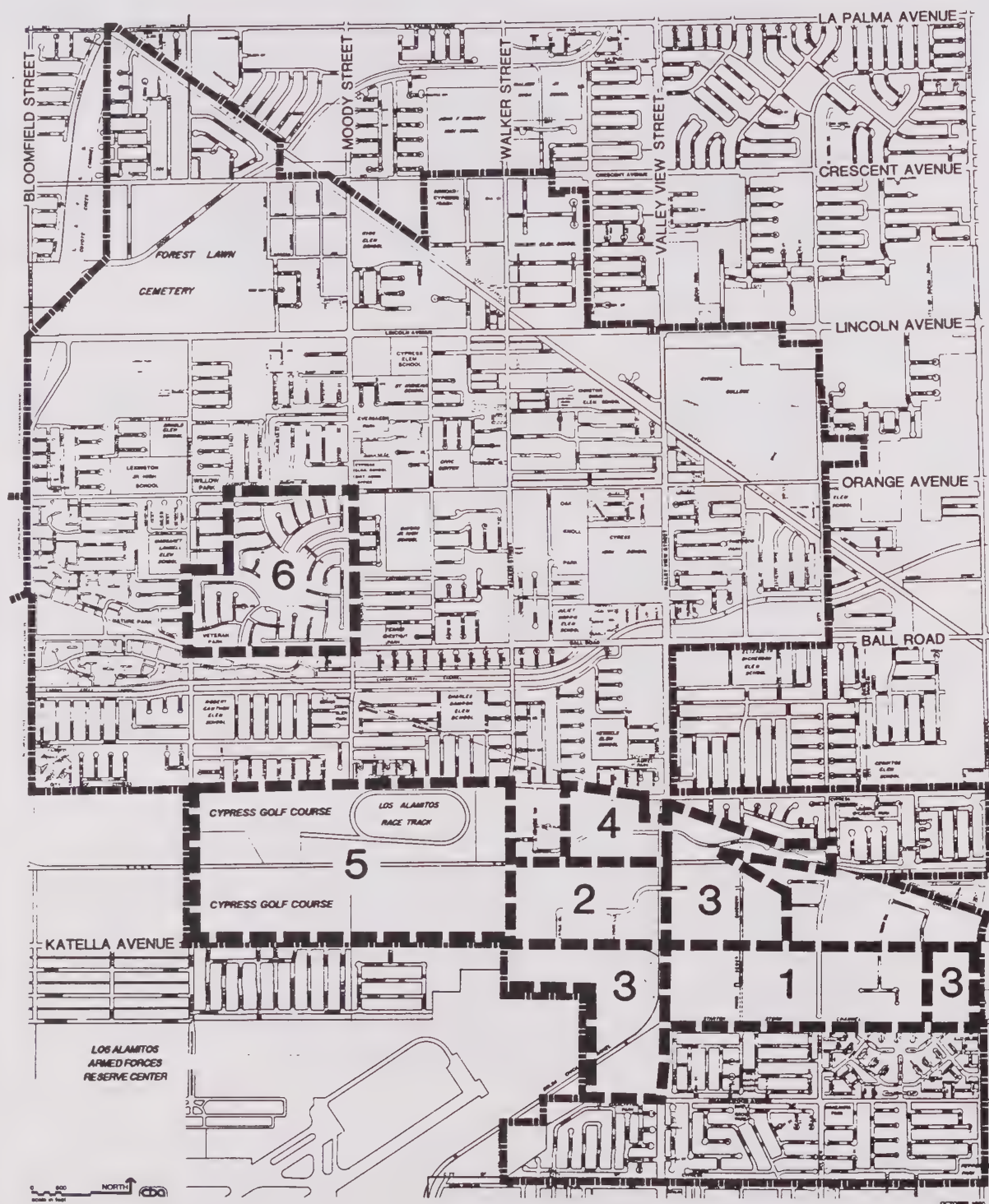
Specific Plans are designed to implement adopted General Plan goals and policies by designating land uses, densities, development and design standards at more specific detail. This can be done by designating specific locations and intensities for land uses.

Individual specific plans do not generally address all issues examined in a General Plan. The specific plan is able to address smaller areas which have unique qualities and require focused planning attention. A specific plan may be designed to implement any of a general plan's elements. The elements which are commonly implemented by a specific plan include land use, circulation, and recreation.

Cypress has adopted five specific plans which provide development guidelines for the Cypress Business Park -- including Cypress Corporate Center Specific Plan, McDonnell Center Specific Plan, Warland/Cypress Specific Plan, Cypress View Limited Specific Plan, and Cypress Business and Professional Center Specific Plan. In addition, the City adopted a specific plan to guide the development of the Sorrento Homes project. The boundaries of each specific plan area are delineated in Figure LU-1.

Redevelopment Plans

The State legislature has enacted laws which permit cities and counties to adopt redevelopment plans that are intended to revitalize and rehabilitate blighted areas. Redevelopment plans provide a means for government agencies to encourage private reinvestment in blighted areas through initial government assistance.



1 Cypress Corporate Center

2 McDonnell Center

3 Warland/Cypress

4 Cypress View

5 Cypress Business and Professional Center

6 Sorrento

SOURCE: City of Cypress Planning Department

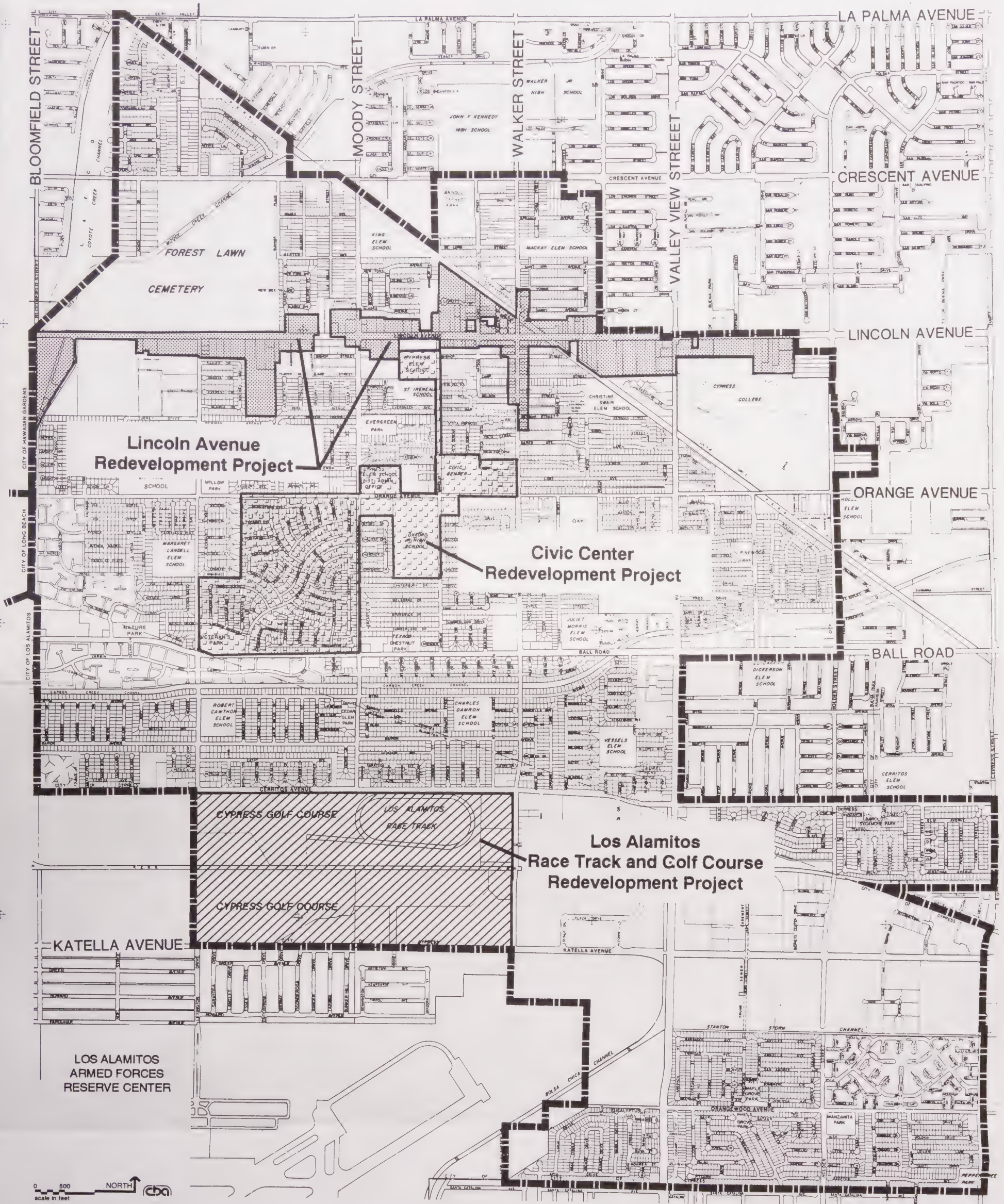
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Figure LU-1
Specific Plan Areas

Redevelopment is intended to eliminate deficiencies and to cause the comprehensive planning, redesign, and reconstruction to facilitate a higher and better utilization of land. It is also intended to increase construction activities and employment. An additional goal of redevelopment is to provide economic stimulation through commercial growth and expansion.

Cypress has adopted redevelopment plans for the following three areas: the Civic Center, Lincoln Avenue, and Los Alamitos Race Track and Cypress Golf Course (see Figure LU-2). The Cypress Redevelopment Agency is currently working on developing a long-range "vision" for each Project Area and establishing a proactive approach to achieve maximum utilization of land.

- The Civic Center Redevelopment Project Area was originally adopted in 1982 and amended in 1988 to encompass the Texaco Tank Farm property. The Plan seeks to improve the focal point of the downtown Civic Center core, and to provide strong public uses to serve the community.
- The Lincoln Avenue Project Area was adopted in 1990. The Lincoln Avenue corridor is lined with a variety of retail commercial establishments, some residential units, and a few heavy commercial establishments. The area was designated as a redevelopment project area due to a number of issues including: inadequate building maintenance, an incompatible mixture of adjoining land uses, defective design and character of physical construction, economic maladjustment, irregular parcelization, and deficient public improvements and facilities. The goal of the Plan is to create a more economically viable and physically attractive commercial corridor.
- In 1990, a redevelopment plan for the Los Alamitos Race Track and Cypress Golf Course was created. This project area was formed with the primary goal of constructing circulation, drainage, and sewer improvements. In addition, the Plan will stimulate construction activity in the area, thereby increasing employment opportunities in Cypress and improving the physical and economic viability of the area.



OCTOBER 1990

SOURCE: Cypress Redevelopment Agency

Development Agreements

Development agreements are authorized by State law to enable a city to enter into a binding contract with a developer which assures the city as to the type, character, and quality of development and additional "benefits" which may be contributed and assures the developer that the necessary development permits will be issued regardless of changes in regulations.

This insures that a developer of a multi-phased project who has based project financing on conditions negotiated with the City at a particular time would not be adversely affected by subsequent, more restrictive regulations. This, in turn, enables the City to extract additional contributions and benefits from the developer.

Cypress is currently entered into development agreements for the following projects: Cypress Business and Professional Center, Cypress Corporate Center, and Sorrento Planned Community. Each of these agreements acts as an implementation tool for the adopted specific plan for each area, providing the developer vested rights to proceed with the land use plan and development standards for the project area. Benefits to the City from these development agreements have included, but are not limited to: refurbishment of the golf course and race track, provision of permanent flood control facilities, dedication of land for parks, and provision of landscaped berms and parkways.

Airport Environs Land Use Plan (AELUP)

The Los Alamitos Armed Forces Reserve Center is located south of Cypress in the City of Los Alamitos. The prevailing approach path for the Army Airfield at the Reserve Center traverses the southern portion of Cypress, primarily in the Business Park. The Airfield is basically a military helicopter reserve training facility. Approximately 97% of total Airfield operations are by helicopters. The remaining operations are principally by two small twin engine based aircraft with occasional operations by transient military and civil support aircraft.

Cypress has the authority to control land uses within the airport's flight approach and the planning area established by

the Airport Land Use Commission (the 100:1 FAA imaginary surface) to protect the public's safety and welfare (refer to Figure S-7 in the Safety Element). Land uses that are appropriate for this area fall within guidelines established by the Airport Land Use Commission (ALUC). Generally, prohibiting residential development in noise impacted areas and avoiding excessively tall buildings or large concentrations of people in areas detrimental to an airport's operation are recommended.

The ALUC for Orange County has adopted a Airport Environs Land Use Plan (AELUP) which governs the following airports:

AFRC Los Alamitos
MCAS Tustin
MCAS El Toro
John Wayne Airport
Meadowlark Airport (currently closed)
Fullerton Airport

The AELUP seeks to protect the public from the adverse effects of aircraft noise to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents and that no structures or activities adversely affect navigable airspace.

City and County general plans must be consistent with the AELUP unless specific findings can be made by the local legislative body. State law grants review powers to the ALUC involving the following actions of local agencies within the planning boundaries:

- Amendment of a City's General Plan;
- Amendments of a City's Specific Plan;
- Adoption of Zoning Ordinances; and
- Adoption of Building Regulations.

This Land Use Element reflects the intent of State law granting to the ALUC review powers of those actions of the City of Cypress enumerated above.

Prior to amending a general plan or specific plan, the involved locality must submit the proposal to the ALUC for review. ALUC review does not however, include other applications, including but not limited to conditional use permits, variances, subdivision or parcel maps, and site plan approvals.

In terms of assessing consistency between local General Plans and the AELUP, the County focuses on the following three areas: noise, safety, and building height. The updated Cypress Noise and Safety Elements address these issues; building height is also examined in the Cypress Zoning Ordinance and Specific Plans for the Business Park. The following building criteria are utilized as part of the County's AEULP consistency review procedures:

- Does the agency have a map or other graphic which depicts imaginary surfaces for the airports which impact the City?
- Are there policies in the General Plan which reference FAA studies and clearances?

Regional Plans

In the latter half of the 1980s, growing regional concern and legislation regarding traffic, air pollution, rising housing costs, and other issues affecting the Southern California community as a whole led SCAG to prepare comprehensive regional plans which address these concerns. Three plans which affect planning in Cypress include SCAG's *Regional Mobility Plan*, *Growth Management Plan*, and the *Air Quality Management Plan* prepared by the South Coast Air Quality Management District (SCAQMD). These three plans are intended to work in concert to reduce traffic congestion and pollutant levels basinwide. Planning strategies focus on reducing automobile and truck traffic on the regional transportation network, as well as at local levels.

Cypress has included in this General Plan relevant policies and programs which reflect and respond to SCAG's and SCAQMD's regional goals. In particular, policies in the Land Use and Housing Elements address regional jobs/housing balance objectives, the Circulation Element contains programs aimed at reducing traffic congestion, the Housing Element discusses Cypress' role in providing affordable housing, the

Growth Management Element addresses the balance of growth with infrastructure capacities, and the Air Quality Element outlines the City's efforts to participate in programs aimed at improving regional air quality.

SCOPE AND CONTENT

The Cypress Land Use Element is divided into four sections: Existing Land Use Characteristics, Land Use Issues and Recommendations, Goals and Policies, and the Land Use Plan and Policy Map. The first section, Existing Land Use Characteristics, describes typical land uses, including residential, commercial, business park, local parks, community facilities, and vacant lands, located within the community. The Land Use Issues and Recommendations section utilizes this data to highlight land use issues confronting the City and establishes the framework for goal formulation and policy and program development. The Land Use Plan identifies how land use policy will be implemented in Cypress.

RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS

The Cypress General Plan contains eight elements. Each element examines a specific issue area, such as land use, safety, or noise. Despite the subject division, each element's content partially overlaps with another element. The relationship between the Land Use and Housing, Circulation, Open Space/Conservation/Recreation, Noise, Air Quality, Safety, and Growth Management Elements is described below.

The Cypress Land Use Element sets forth regulations, such as intensity standards, because State Planning Law requires that local jurisdictions adopt standards that specify permitted levels of residential, commercial, and industrial intensities. By defining the extent and density of future residential development in Cypress, the Land Use and Housing Elements jointly work to meet the community's share of regional housing needs.

The Land Use Element is coordinated with the Circulation and Open Space/Conservation/Recreation (COSR) Elements. As community densities increase gradually over time,

additional services and facilities are needed to accommodate the population growth. Improvements to a City's transportation network and recreation facilities are examples of some of the improvements that will need to occur. Cypress' Circulation and COSR Elements outline needs, opportunities, and deficiencies which correspond to the development permitted within the Land Use Element.

Policies and implementation measures contained in the Land Use Element are also partially derived from safety and health concerns delineated in the COSR, Noise, Air Quality, and Safety Elements. For example, the COSR and Safety Elements identify areas that should remain undeveloped because of flooding, geologic instability, and other safety concerns. Oftentimes, right-of-ways are established in the Land Use Element to create safety zones to protect the public's safety and welfare. Similarly, sensitive receptors (hospitals, schools) are identified in the Noise and Air Quality Elements because they are the most affected by noise and air pollution conditions. The Land Use Element utilizes this information to generally locate sensitive receptors away from primary noise and air pollution contributors.

In addition, slowed growth patterns established in the Growth Management Element aid the Land Use Element in guiding Cypress' future development. Combined, all of these issues influence development in the community, as the Land Use Element utilizes information presented in other elements to position land uses a safe distance from hazards and to provide sufficient services for new development.

EXISTING LAND USE CHARACTERISTICS

This section of the Land Use Element describes existing land use characteristics in the City. Figure LU-3 graphically depicts existing uses in Cypress, and Table LU-1 quantifies the amount of acreage devoted to each land use.

Land use data was obtained from a variety of sources to construct the Existing Land Use Map for Cypress. City staff conducted field surveys, and Cotton/Beland/Associates supplemented this information through field checks and review of aerial photographs.

The land use information was subsequently digitized into a computer readable format. This process created a computer generated existing land use map and corresponding statistics, which specified land uses by type and acreage. Statistical calculations translated the total land use acreages into dwelling units, building square footage, and residential population. The statistics and map serve as the base data to develop the Land Use Element.

RESIDENTIAL

Cypress is a relatively young suburban community in northwestern Orange County. Residential land uses constitute the majority of development in Cypress, comprising over forty percent of the City's total acreage. Typical housing types include low density single-family homes, small multi-family projects, higher density condominiums, and mobile homes.

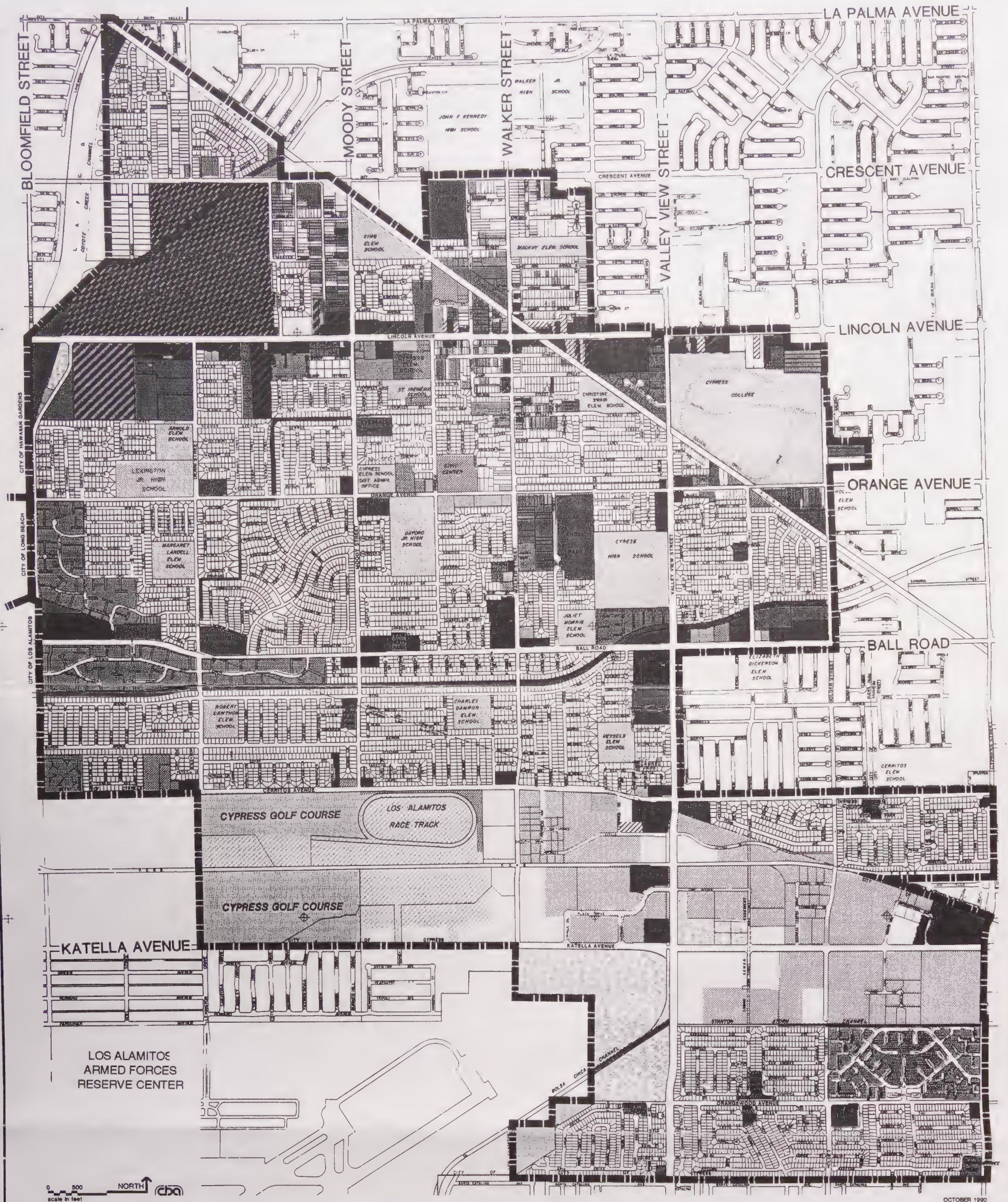
Low Density Residential Development

Single-family homes encompass approximately three-quarters of the total land acreage occupied by residential uses with a total of 9,054 single-family detached units counted in the 1990 Census. The majority of the City's low density single-family neighborhoods were constructed during the 1960s as Cypress' land converted from agricultural uses to large tracts of single-family homes. The low density neighborhoods are characterized by tract densities of approximately 0-5 du/acre.

**TABLE LU-1
EXISTING LAND USE**

LAND USE DESIGNATION	EXISTING ACRES
Low Density Residential	1,380
Medium Density Residential	230
High Density Residential	113
Mobile Home	<u>32</u>
Subtotal	1,755
Retail/Restaurant	154
Service	31
Office	26
Hotel/Motel	9
Race Track	<u>118</u>
Subtotal	338
Business Park	298
Light Industrial	<u>32</u>
Subtotal	330
Park	79
Golf Course	<u>134</u>
Subtotal	213
Government	18
Schools	297
Cemetery	150
Churches	29
Drainage Channels/Utilities	<u>68</u>
Subtotal	562
Vacant	139
Agriculture	<u>112</u>
Subtotal	251
Streets	899
Rail Transportation Corridor	<u>52</u>
Subtotal	951
TOTAL ACRES	4,400
SQUARE MILES	6.9

Source: City of Cypress Planning Department
Cotton/Beland/Associates, Inc., November 1991.



- RESIDENTIAL**
- Low Density
 - Medium Density
 - High Density
 - Mobile Home

- COMMERCIAL**
- Retail/Restaurant
 - Service
 - Office
 - Hotel/Motel
 - Race Track

- INDUSTRIAL**
- Business Park
 - Light Industrial
- PARKS AND RECREATION**
- Park
 - Golf Course

- COMMUNITY SERVICES AND FACILITIES**
- Government
 - School
 - Cemetery
 - Church
 - Drainage Channels/Utilities

- OTHER**
- Vacant
 - Agriculture

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Figure LU-3
Existing Land Use

The northern portion of Cypress contains a unique rural residential neighborhood located on Gay and Denni Streets. Development in this area occurred under the County's standards, as the area was developed prior to annexation into the City in 1988. Lot sizes and public improvements on these streets vary from typical residential developments found elsewhere in Cypress, and equestrian and farm animals are present on several parcels.

The City recently gained a significant opportunity for residential development on an 140 acre site previously occupied by the Texaco Tank Storage Farm which has undergone extensive clean-up procedures. A specific plan has been developed for the tank farm property, now known as Sorrento, providing for 671 single-family units under the Planned Community Residential zoning designation. According to the Cypress Planning Department, 229 homes were available for occupancy in December 1991.

Medium and High Density Residential Development

As available acreages for single-family development diminished in Cypress, multi-family development began increasing in the City. Multi-family units increased by 17 percent during the 1980s in Cypress compared to a ten percent increase in single-family units. According to the 1990 Census, there are 2,329 attached single-family homes, 94 duplexes, 388 triplex/fourplex, and 2,303 apartment/condo units in the City.

Condominium units represent a significant portion of the City's multi-family housing stock. Condominiums have been developed under Planned Residential Development standards along the City's western border by Ball Road (Tanglewood), and in the southeastern portion of the City. Smaller condominium projects have been developed throughout Cypress, and particularly in the northern portion of the City. These residential projects have been primarily constructed since the 1970s when planned condominium developments became popular solutions to changing housing demands.

Mobile Homes

Mobile homes supplement the supply of affordable housing opportunities in Cypress. Two mobile home parks are located within the City's jurisdiction along Lincoln Avenue, the largest of which is located at the western entrance to the City. Based on the 1990 Census, there are 373 mobile home units within Cypress.

COMMERCIAL

Commercial uses encompass approximately 338 acres or nearly eight percent of Cypress' total acreage. Lincoln Avenue serves as the City's primary commercial thoroughfare and includes a mix of commercial uses, such as retail centers, service-oriented business, offices, and motels. Additional neighborhood-serving commercial uses are located throughout the City. The following section examines the type and extent of commercial uses in Cypress.

Retail

Retail uses are the most widely distributed commercial land use in Cypress, encompassing almost half (154 acres) of the land devoted to commercial uses within the City. This land use category includes restaurants and other uses that are sales oriented such as apparel stores, and grocery stores. Larger retail centers with anchor tenants including Mervyn's, Target, and Ross have also been developed and are located primarily in the Cypress Business Park.

Service

Service commercial uses include those businesses that provide some type of service, such as dry cleaners, barber and beauty shops, and travel agencies. Their distribution in Cypress is fairly limited (31 acres) and comprise only nine percent of commercial lands in the community. The majority of service uses are located along Lincoln Avenue.

Office

Office uses encompass 26 acres of land in the City, representing less than eight percent of all the commercial land in the community. Offices have been defined to include professional and administrative offices, and do not encompass the large office complexes developed in the Cypress Business Park. Small-scale offices are scattered throughout the community with some concentration along Lincoln Avenue.

Hotel/Motel

Hotels and motels comprise nine acres or approximately two percent of the City's commercial land. The majority of the City's motels are located along Lincoln Avenue, and are generally smaller facilities. However, as part of the growing Cypress Business Park, two full service hotels have been developed - Ramada Inn and Woodfine Suites - to accommodate business travelers.

Race Track

The 118-acre Los Alamitos Race Track is located in the southern portion of the City. Over 1.5 million people annually attend the quarter horse and harness races featured at the race track. Los Alamitos Race Track is a significant regional recreation resource.

INDUSTRIAL

The Industrial land use designation includes both light industrial and business park uses. Combined, these uses encompass approximately eight percent of the City's total land acreage.

Business Park

The 587-acre Cypress Business Park located in southern Cypress is approximately one-half built out with business park-related land uses. As of November 1991, the developed

portion of the business park comprised 298 acres or seven percent of Cypress' total acreage.

The Cypress Business Park has attained a high quality of development through the use of Specific and Master Plans which coordinate development in the area and set forth design standards for development. The following Specific Plans govern development within the business park:

- Cypress Corporate Center Specific Plan
- McDonnell Center Specific Plan
- Warland/Cypress Specific Plan
- Cypress View Limited Specific Plan
- Cypress Business and Professional Center Plan

Light Industrial

The number of light industrial land uses in Cypress are somewhat limited and cover only 32 acres (1%) of land in the City. Parcels identified as light industrial are primarily located adjacent to Lincoln Avenue, with a light industrial park located at Lincoln and Valley View. The majority of light industrial uses in Cypress are related to automotive repair.

PARKS AND RECREATION

Cypress contains substantial park and open space resources. The City currently operates 19 parks sites encompassing 78 acres. In addition, the Cypress Golf Club and a portion of the Navy Golf Course are located in the southern portion of the community.

Parks

The City classifies parks as community, neighborhood, or mini-use facilities based on park size and the range of facilities. Two community park facilities, Arnold/Cypress

Park and Oak Knoll Park, are located on 14 and 21 acres of land, respectively. The City contains substantially more neighborhood parks with a total of fourteen located in the community. These parks serve the neighborhood within 1/2 mile walking distance. Neighborhood parks comprise approximately 45 acres of the City's land. The remaining total park acreage is composed of mini-parks, which generally encompass less than one acre of land and are located near schools, residential developments, or downtown areas.

Golf Courses

Cypress contains two golf courses within its jurisdictional boundaries. The Cypress Golf Club (formerly the Cypress Golf Course) located adjacent to the Los Alamitos Racetrack will serve as a premier privately-owned golf facility. The 106-acre golf course has recently undergone major improvements, and includes an 18-hole course, practice range, and club house. A portion of the Navy Golf Course associated with the Los Alamitos Armed Forces Reserve Center is located in southern Cypress. This golf course is restricted for use by Navy personnel.

COMMUNITY SERVICES AND FACILITIES

For purposes of this analysis, community services and facilities include government buildings, schools, churches, drainage channels/utilities, and a cemetery. Combined, these uses comprise a total of 562 acres or thirteen percent of Cypress' land.

Government Facilities

Government buildings are primarily concentrated at the City's Civic Center. The Civic Center grounds include the City Hall, police station, library, and tennis courts. Landscaping surrounds these facilities, thereby creating a substantial amount of open space land amongst the adjoining residential uses. The City owns an additional facility in northern Cypress as a storage yard for their maintenance supplies.

Schools

Cypress contains approximately 298 acres of land dedicated as education facilities. There are nine elementary schools, two junior high schools, one high school, and Cypress Junior College located in the community.

All of these school facilities are currently being utilized for educational purposes, except for Landell and MacKay Elementary Schools and Oxford Junior High School. According to the Cypress Elementary and Anaheim School Districts, these school sites are closed. However, the growing youth population in Cypress will require the re-opening of Landell School. The school site will undergo renovations during 1992 prior to the school's re-opening. The MacKay School site is also closed and the facilities are currently leased to the Head Start Program.

Cemetery

Forest Lawn Cemetery and Mortuary off Lincoln Avenue encompasses approximately 150 acres. This large expanse of rolling green land serves as the western entrance to the City, and provides a significant open space resource for the community.

Churches

A number of churches are located throughout the community of Cypress. Churches are generally under five acres in size, and in total comprise 29 acres of the City's total land acreage.

Drainage Channels/Utilities

Six storm drain channels, Moody Creek, Coyote Creek, Carbon Creek, Stanton Creek and Bolsa Chica Creek, and an un-named channel traverse Cypress. The Moody Creek and Coyote Creek Channels cross the northwest portion of Cypress through Forest Lawn Cemetery. The central portion of the community is encompassed by the 2A and Carbon Creek Channels. Bolsa Chica and Stanton Creek Channels provide drainage facilities for the southern portion of the community.

The Existing Land Use Map also identifies as public utilities, (i.e., electric substations, etc.) Combined public utilities and drainage channels encompass approximately 68 acres of land in Cypress.

VACANT

The majority of Cypress has been developed; however, 139 acres of vacant land and 112 acres of agriculture land still exist comprising six percent of the City's total acreage. All remaining large vacant and agricultural parcels are located in the Cypress Business Park. Lands in the Business Park are subject to the regulations outlined in the various specific plans that guide development in these areas.

TRANSPORTATION FACILITIES

A hierarchy of local streets create Cypress' transportation network. The Circulation Element identifies three major arterial streets: Lincoln Avenue, Valley View Street, and Katella Avenue. The Congestion Management Plan (CMP) has also designated Katella Avenue as a CMP street. The Circulation Element designates the following streets as primary arterials: Ball Road, Cerritos Avenue, Moody Street, and Knott Street. Both the "major" and "primary" arterials provide through access to large volumes of traffic between major activity uses.

In addition to the local transportation network, two rail lines traverse Cypress in the northern and southern portions of the community. The southern line transports goods through the business park and golf course/racetrack area. Combined, the railroad lines and street network comprise 951 acres of land in the community.

LAND USE ISSUES AND RECOMMENDATIONS

As part of the update to the Cypress General Plan, City staff and the City Council identified six "Special Study Areas" in the community which required in-depth review in the General Plan. These study areas included: Lincoln Avenue; the 1988 Crescent/Walker Annexation Areas; Cypress Business Park; Wicker Drive; DeLong Street; and properties designated Public/Semi-Public. Citizen Advisory Committees consisting of five to six members each were formulated for each Study Area to evaluate land use issues and ultimately to develop General Plan land use recommendations; a list of Committee participants is included in the introductory pages of the General Plan. The Advisory Committees met over a period of several months, and in almost every case were able to develop consensus as to their recommendations.

The following section describes the characteristics of each study area, sets forth the issues to be resolved, and presents the policy direction established by the Committee. This policy direction has, for the most part, served as the basis both for developing land use goals and policies in each study area, and for defining the Land Use Plan. Any discrepancies between the Committee's recommendations and the Land Use Plan are described.

LINCOLN AVENUE STUDY AREA

Lincoln Avenue serves as Cypress' main commercial thoroughfare through the City and has developed as a highway-oriented strip commercial corridor. Until the annexations occurred in the northern portion of the City, jurisdiction over Lincoln Avenue was shared among several jurisdictions with varied development standards. As a result, properties along the corridor were subdivided and developed without a set of cohesive guidelines or controls. This fragmented pattern of development is evidenced in the varied development standards and irregular parcel sizes throughout the Lincoln Avenue corridor.

A land use survey conducted of the 255 addresses along Lincoln Avenue documents the following distribution of land uses along the corridor, and predominant types of uses in each:

**TABLE LU-2
LINCOLN AVENUE - EXISTING LAND USE**

LAND USE	NUMBER OF ADDRESSES	PREDOMINANT USES
Services	78	Auto Repair, Service Stations, Beauty/Barber Shops, Instant Printing
Retail	51	Convenience Markets, Florists, Liquor Stores, Auto parts, Auto Sales
Office	41	Small Medical Offices Insurance Offices Banks, Real Estate
Restaurant	27	Fast Food (70 % of all restaurant uses) Numerous cocktail lounges
Residential	13	Predominantly scattered Single-Family Homes
Motel	9	
Vacant	36 (14% vacancy rate)	

Source: City of Cypress Planning Department, November 1990.

The land use survey illustrates a variety of local-serving, independently operated businesses along Lincoln Avenue. The majority of land uses along the corridor evidence high turnover and weak market support, and lack any clear groupings or focal points of concentrated development activity. Figure LU-4 delineates the boundaries of the Lincoln Avenue Study Area.



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Figure LU-4
Lincoln Avenue Study Area

In order to provide for more cohesive and organized development along the City's major thoroughfare, the City of Cypress, in February 1990, adopted a Redevelopment Plan for the Lincoln Avenue corridor. The Lincoln Avenue Redevelopment Plan is intended to facilitate the economic development of the corridor through upgrading of existing businesses, and attraction of new development. The Redevelopment Plan is entirely consistent with the General Plan, and will serve as a tool to implement the policies established for the Lincoln Avenue corridor.

Issues for Consideration

- The primary task of the Lincoln Avenue General Plan Committee was to define a future vision for the City's main commercial thoroughfare to enhance the image and vitality of the corridor. The Committee considered the types of land uses which should be encouraged along the corridor, and discussed appropriate "groupings" of uses.
- The Committee reviewed existing General Plan (Heavy Commercial) and zoning (Lincoln Avenue Combining Zone) designations as to their continued appropriateness to implement the "vision" for Lincoln Avenue. The existing Heavy Commercial General Plan designation provides for establishments catering primarily to highway travelers, visitors to the City, or such businesses or uses where direct access to major arterial highways is essential or desirable for their operation. The Lincoln Avenue Combining Zone allows for any urban use, subject to a conditional use permit. These designations have permitted a variety of land uses, many of which are incompatible on Lincoln Avenue.
- The General Plan Advisory Committee identified a variety of goods and services they currently purchase outside Cypress. The Committee evaluated different mechanisms to attract these land uses to locate on Lincoln Avenue.

Study Area Policy Direction

In order to provide some organization to the current fragmented pattern of land uses along Lincoln Avenue, the Committee felt it was important to define focal points of

development with cohesive groupings of land uses. By specifically encouraging the creation of unique development "activity nodes" at locations at the western and eastern "gateways" of Lincoln Avenue, properties between these nodes could also gain economic stimulation. The Committee specifically recommended creation of an "international bazaar" concept at the western gateway to Lincoln Avenue which expands on existing international restaurants, and an "entertainment complex" at the eastern gateway which capitalizes on the adjacency to Cypress College.

The Committee also felt the inclusion of higher density residential along Lincoln Avenue was essential to stimulate economic activity. Residential development could take the form of a mixed use project above ground floor commercial, or as a separate multi-family project.

The Committee stressed the importance of upgrading the visual image along the entirety of Lincoln Avenue and creating an exciting atmosphere to entice motorists traveling through the City to visit shops, restaurants and entertainment areas in Cypress. As a means of defining and implementing a cohesive urban design plan for Lincoln Avenue, the Committee recommends creation of a Specific Plan. The Specific Plan will provide a more finite specification of the types of uses to be permitted and establish integrated development standards related to building heights and setbacks, landscape, and architecture.

As for the continued appropriateness of the existing "Heavy Commercial" General Plan designation and "Lincoln Avenue Combining Zone" district, the Committee felt these designations were inadequate to implement the "vision" defined for the Lincoln Avenue commercial corridor. The Committee suggests the following modifications be made to General Plan and zoning:

- Revise the current highway-oriented "Heavy Commercial" General Plan designation to "General and Neighborhood Commercial" which accommodates office, neighborhood commercial, community shopping centers, retail and wholesale commercial, and light industrial in conjunction with commercial uses.
- Add a "Lincoln Avenue Specific Plan Overlay" on the General Plan to accommodate flexibility within the

"General and Neighborhood Commercial" designation, and to specifically allow for residential uses. Properties within the overlay district would be offered special incentives, such as increased densities, to encourage the revitalization of the corridor. Incentives could also be provided for specific types of uses the City wishes to encourage, such as entertainment uses, and for incorporation of urban design amenities such as street furniture and banners.

- Revise the current "Lincoln Avenue Combining Zone" District to a "Commercial/Residential Mixed Use" zone. Carefully delineate permitted uses in the zone to avoid requiring Conditional Use Permits for land uses the City wishes to encourage.

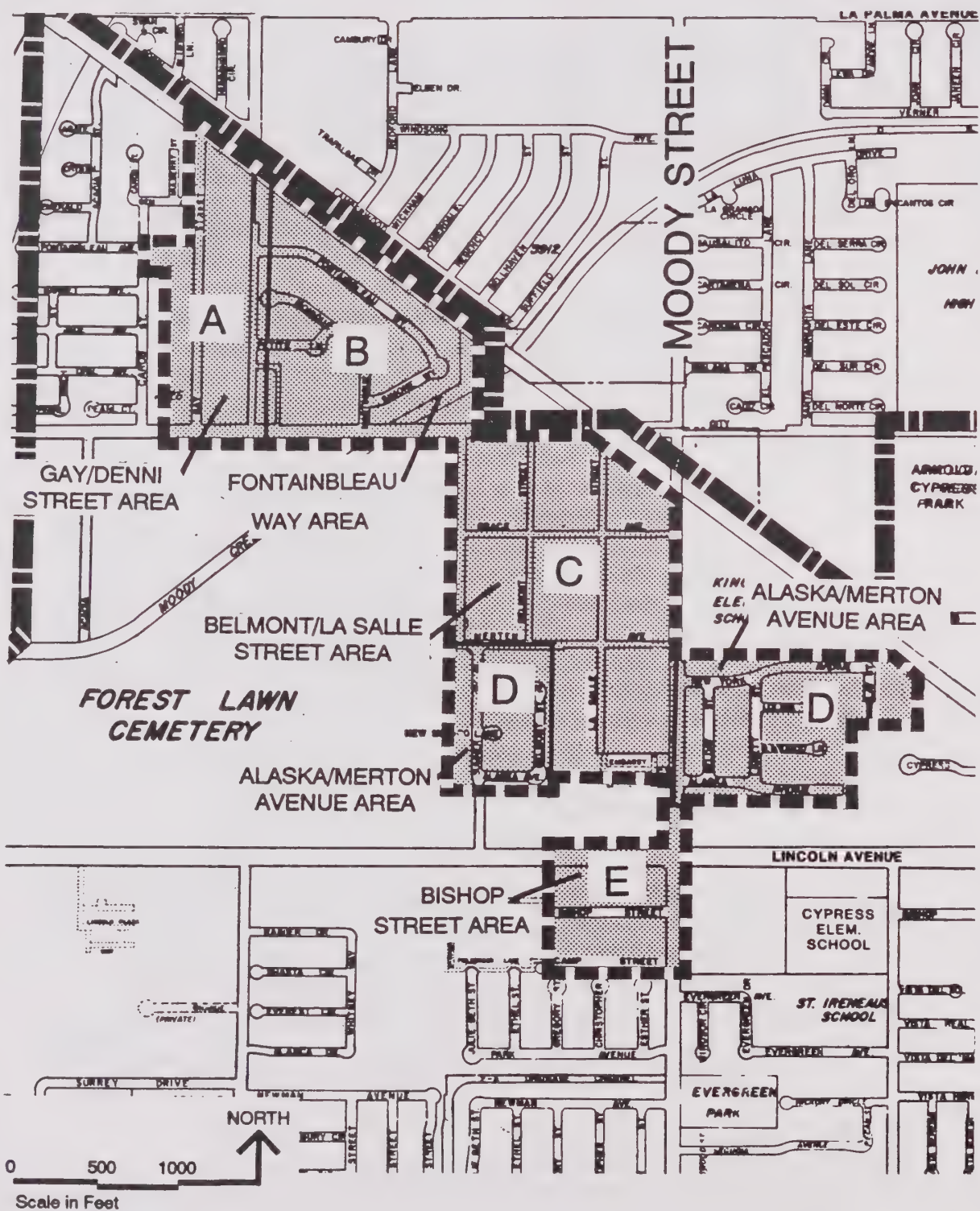
In response to the Committee's recommendations, a Lincoln Avenue Specific Plan Overlay has been added to the Land Use Plan and policies included in the Element to address the Committee's concerns regarding the visual image of the corridor. An economic/real estate feasibility study will be prepared to more precisely define the land uses, development standards, and incentives to be set forth in the Lincoln Avenue Specific Plan.

ANNEXATION STUDY AREAS

The Crescent/Lincoln area was annexed into Cypress in 1988. This 148-acre area is generally located north of Lincoln Avenue and extends as far as Grindley Street to the east, Camp Street to the south, and Carob Street to the west. Based on differing characteristics of the neighborhoods which comprise the Annexation Area, this area has been divided into five subareas. These five subareas are delineated on Figure LU-5.

Area "A" - Gay/Denni Street Area:

Single-family residential land uses comprise the majority of this area with farm animals present on several of the larger residential parcels. The absence of sidewalks, curbs, and gutters further perpetuates the area's rural ambiance that characterized the area's original agricultural orientation.



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Figure LU-5
Annexation Study Area

The residential units between Gay and Denni Streets are over 30 years of age. Deferred maintenance and the age of the structures contribute to the physical decline of the housing stock. According to City staff, the area has a high incidence of code violations related to property maintenance.

Area "B" - Fontainebleau Way Area:

The Fontainebleau Way Area is a stable single-family neighborhood. The low density General Plan and Zoning designations preserve the low density character of the neighborhood.

Area "C" - Belmont/La Salle Street Area (District 8):

Single-family residences comprise the majority of the Belmont/La Salle Street Area. Some multi-family infill has occurred due to the High Density General Plan designation and RM-20 zoning. Though there is no vacant land remaining in this area, it is anticipated that the area will recycle into a high density residential neighborhood, thereby providing one of the few additional rental housing opportunities in the City.

The Belmont/La Salle Street Area still exhibits many of the rural characteristics typical of the Annexation Area. However, both the Farm Animal Overlay, which permits the continuance of existing farm animals, and the lack of complete public improvements are incompatible with high density residential development.

Area "D" - Alaska/Merten Avenue Area:

Area "D" includes two neighborhoods within the Annexation Area. Both of these areas are established single-family neighborhoods with no multi-family encroachment occurring. The majority of residences in the area were constructed forty to fifty years ago.

Area "E" - Bishop Street Area:

Area "E" is designated as Heavy Commercial in the 1986 General Plan and is within the Lincoln Avenue Combining Zone, which permits the development of any urban use subject to a Conditional Use Permit. The resulting land uses in the Bishop Street Area are variable. Small single-family homes are situated on the south side of Bishop Street, and the north half contains a number of commercial uses that front Lincoln Avenue. Residents face the loading/trash areas of these commercial uses, presenting compatibility problems.

Issues for Consideration

Three primary issues surfaced in relation to the annexation area: determining 1) appropriate residential densities in District 8; 2) upgrading the Gay and Denni Street neighborhood while preserving the area's rural character; and 3) appropriate future use in the Bishop Street area. Other neighborhoods in the Annexation Area (Areas "B" and "D") will remain as low density residential, and special planning considerations were not deemed necessary.

Study Area Policy Direction

The Committee's recommendations for the Annexation Area are as follows, and have been incorporated into the goals and policies section of the Element.

Area "A" - Gay/Denni Street Area:

This single-family neighborhood exhibits many characteristics of yesterday's Cypress. The Committee recognized the importance of maintaining the rural ambiance and low density character of the area. However, the area also needs substantial upgrading of existing residential units.

To maintain the neighborhood's rural ambiance, the Committee proposes to keep the Low Density General Plan designation. In addition, they suggested the City review Planned Residential Development (PRD) zoning as a possible overlay zone to allow for more than one unit per lot to provide incentive for investment in the area. However, the Committee recognized that the provisions currently included in the PRD zone would need to be revised to apply to the Gay/Denni Street area. In particular, the PRD overlay now requires a five-acre minimum lot size; however, the average lot size is considerably smaller in the Gay/Denni Street area. Overall, existing development standards in the PRD overlay need to be reviewed to ultimately avoid over-building on lots and maintain the single-family streetscape.

The Committee made two additional recommendations for this neighborhood. One is to encourage the area's transition to new residential uses through upgrading of streets and infrastructure (curbs and gutters) without accompanying housing rehabilitation assistance. Second, the Committee

urged the City to conduct targeted code enforcement in the area.

Area "C" - Belmont/La Salle Street Area (District 8):

Improvements to the area's infrastructure network will be essential to provide adequate facilities in conjunction with the future high density residential development. This is one of the few remaining areas in Cypress which can accommodate high density, multi-family infill, and is thus essential to fulfill the City's share of regional housing needs. The Committee proposes to maintain the current High Density General Plan designation and RM20 zoning. In addition, the City Council recommends establishing an amortization period to eliminate farm animals from the area to improve land use compatibility.

Area "E" - Bishop Street Area:

The Committee recognized the compatibility problems between existing commercial and residential uses in Area "E". Aesthetic and health and safety factors prompted the Committee to recommend that the entire nine-acre area be developed with a community shopping center.

CYPRESS BUSINESS PARK STUDY AREA

The 587-acre Cypress Business Park comprises 15 percent of the City's total land inventory, and is approximately one-half built out with light industrial, office and commercial land uses (see Figure LU-6). The following five Specific Plans govern development in the Business Park:

- Cypress Corporate Center Specific Plan
- McDonnell Center Specific Plan
- Warland/Cypress Specific Plan
- Cypress View Limited Specific Plan
- Cypress Business and Professional Center Specific Plan

The five specific plans adopted for the Cypress Business Park regulate development intensity through Floor Area Ratio (FAR), and each has established an overall FAR standard of 1.0 (allowable total building floor area/total parcel area).

The General Plan designation for this study area is "Business Park," which is intended to encourage the development of parcels in the Cypress Business Park as coordinated,

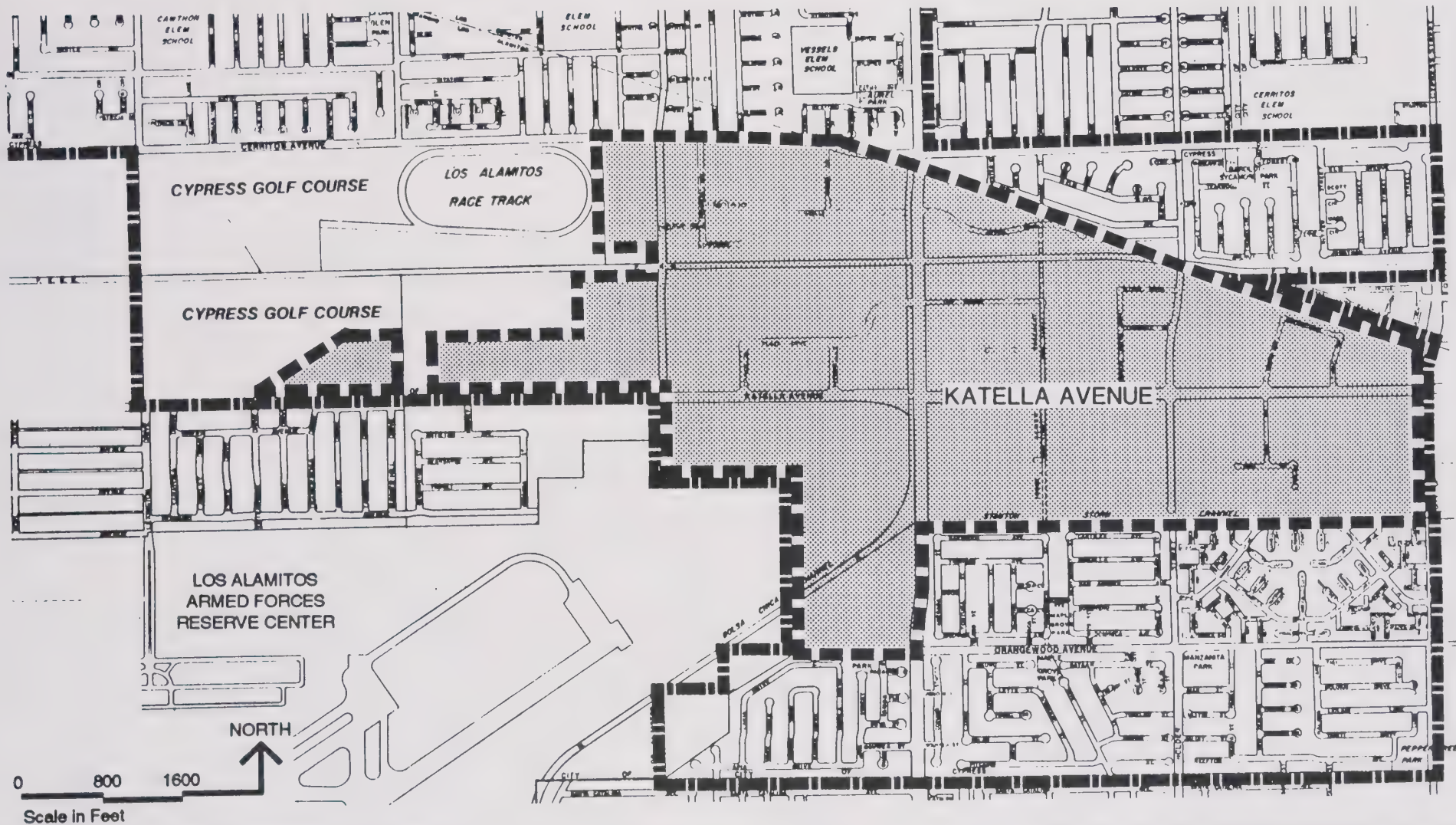


Figure LU-6
Cypress Business Park Study Area

comprehensive commercial and light industrial projects. The 1986 General Plan Business Park designation does not specify building intensity.

Issue Areas for Consideration

- The major task of the Committee was to evaluate the success of existing development in the Business Park from the perspective of Cypress residents, and to assess whether any changes in development standards should be implemented for remaining future development. The Committee specifically discussed the establishment of a General Plan FAR Standard for the Business Park, and evaluated the continued appropriateness of the FAR development intensities currently permitted under the Specific Plans.

Study Area Policy Direction

Review of actual development in the Business Park indicates average intensities well below 1.0:1 FAR. The Committee expressed concern regarding traffic congestion along the major arterials in the Business Park during peak travel periods, even with only half the Business Park currently developed and the majority of existing development built at densities well below the permitted 1.0:1 FAR. However, given the adopted specific plans in the Business Park and pre-existing development agreements, the City's options to reduce permitted development intensities are somewhat limited. Therefore, policy direction is to carefully review new developments to ensure impacts are fully mitigated.

The Committee recognized that improper site design and inadequate ingress and egress were significant contributing factors to poor traffic flow in the Business Park and can be more easily regulated than FAR standards. In addition to site design, the type of business occupying a site also affects the amount of traffic generated. In order to address these concerns, the following policies will be incorporated into the General Plan:

- Review current City standards to ensure adequate site development criteria.

- Give special consideration to traffic issues during site review.

The Committee's recommendations have been incorporated as policy into the Land Use Plan.

WICKER DRIVE STUDY AREA

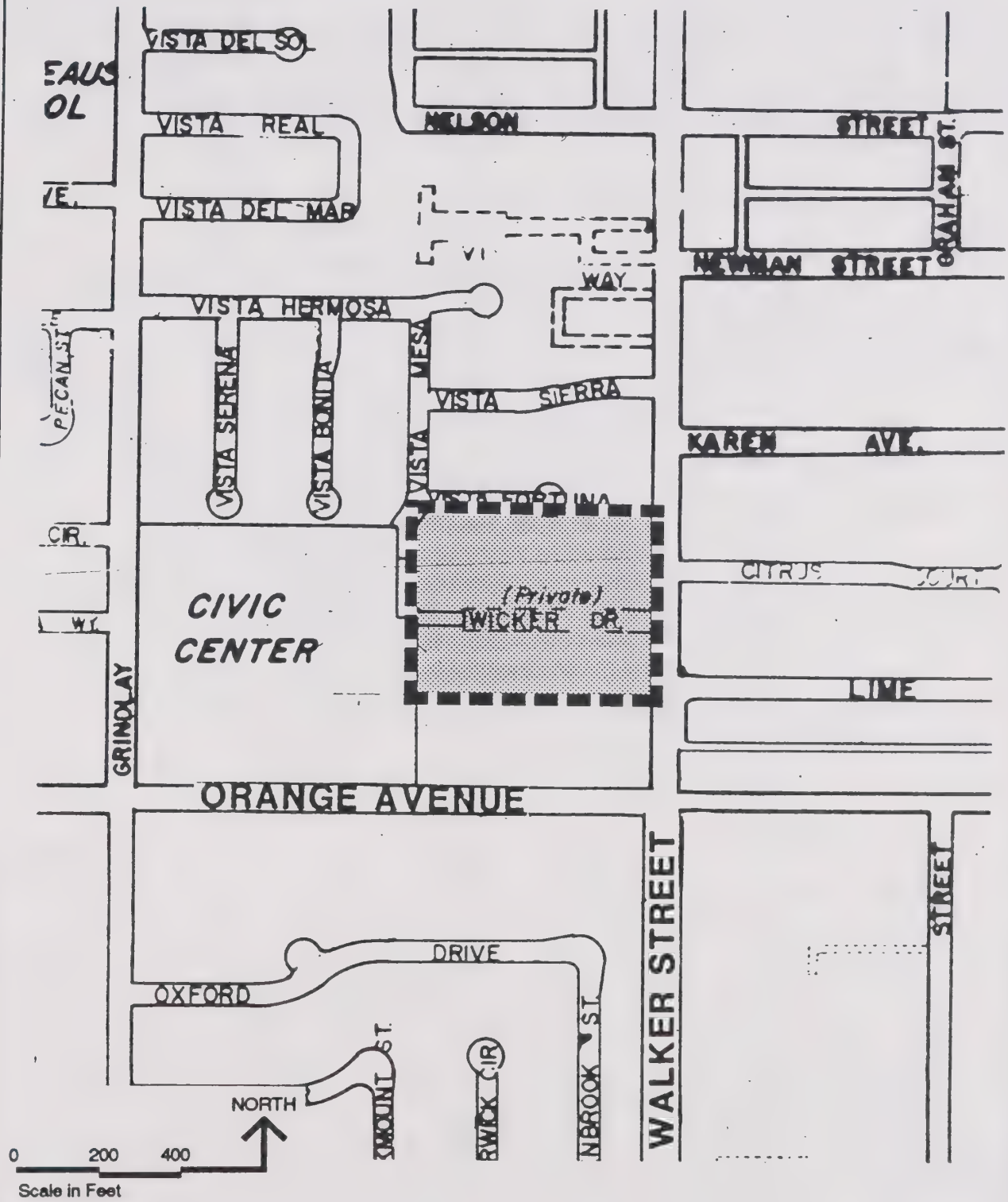
The Wicker Drive Study Area, partially cleared of previous development, encompasses 4.64 acres of property located immediately east of the Cypress Civic Center (see Figure LU-7). The Cypress Redevelopment Agency owns the majority of the site, with the Cypress School District owning an unspecified half (2.32 acres) of the Wicker Drive site acquired by the District in the exchange for property on the Cypress Elementary School site. The Redevelopment Agency and School District are presently proceeding with a joint venture for development of the Wicker Drive property. If no joint venture project commences within three years of July 1989 (unless mutually extended), the Agency shall convey a specific parcel of 2.32 acres in the Wicker Drive study area to the District.

The current General Plan designation for the Wicker Drive Study Area is for High Density Residential use, permitting up to 20 units per acre. The study area is zoned for Planned Residential Development (PRD), providing for flexibility in project design by allowing General Plan densities to be averaged over the entire parcel.

In addition to the PRD base zoning, a Civic Center Combining Zone has been designated for Wicker Drive to encourage the linkage of this area with the adjacent Civic Center. The Wicker Drive Study Area is also a part of the Civic Center Redevelopment Plan which seeks to improve the focal point of the downtown Civic Center core.

Issues for Consideration

- The primary issue for consideration along Wicker Drive is to determine the appropriate future use of the area. The Cypress Redevelopment Agency is in the process of negotiating with the Cypress School District to obtain



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Figure LU-7
Wicker Drive Study Area

ownership of those parcels within the Wicker Drive Study Area currently owned by the District. Once the Agency attains ownership of the entire study area, a variety of land use options will be available.

Study Area Policy Direction

Given the adjacency of the Wicker Drive Study Area to the Civic Center and the policy direction of the City to provide linkage between the two areas, the Committee supports community-oriented development on Wicker Drive. More specifically, the Committee recommends the development of a multi-purpose cultural arts center on Wicker Drive.

Subsequent to the Committee's recommendations, the Redevelopment Agency purchased the 1.2 acre Orange Avenue frontage directly south of the Study Area. This property will need to be evaluated with the Wicker Drive site to determine future uses. Given the issues regarding multiple land ownership on Wicker Drive, the need to assess market feasibility of a cultural arts center, and the desire to establish a cohesive vision for the entire Civic Center Redevelopment Project Area, the City prefers to keep policy direction for Wicker Drive general at this time. Policies have been included in the Plan to encourage community-oriented uses on Wicker Drive to provide linkage with the adjacent Civic Center.

DELONG STREET STUDY AREA

DeLong Street is a two block residential street located midway between Lincoln and Crescent Avenues (see Figure LU-8). The street is characterized by older (1950-1960) single-family homes developed primarily on 6,000 square foot lots. No remaining vacant parcels exist along DeLong. The neighborhood developed under the jurisdiction of Orange County and was annexed into Cypress in 1982 as part of the Walker/Crescent annexation.

The existing (1986) Cypress Land Use Element divides DeLong Street into two land use categories. DeLong Street west of Watson Street is designated for "Low Density Residential" (5 du/acre), whereas the eastern portion of



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DeLong is designated "Medium Density Residential" (15 du/acre). These General Plan designations provide comparable densities to those previously permitted when DeLong Street was under the jurisdiction of the County.

The medium density General Plan designation along the eastern segment of DeLong Street allows for the recycling of existing single-family uses to multi-family residential. A 10-unit apartment complex has been developed at the corner of DeLong and Walker Streets, representing the first multi-family project developed under the RM-15 zoning on DeLong Street. While the RM-15 zone permits by right the development of only eight units on this property, an additional two density bonus units were granted for setting these units aside for lower income households at affordable rents.

Issues for Consideration

- The major issue for consideration was to evaluate the appropriate residential densities for future development along this street. While DeLong Street is completely built out with no remaining vacant land, higher density zoning and General Plan designations may stimulate the recycling of single-family homes to multi-family uses.
- Consideration will need to be given to the capacity of existing public facilities (eg., streets, schools, parks) to accommodate additional residential densities.

Issue Area Policy Direction

Increased densities on DeLong Street were shown to have a negligible impact on the circulation network and public facilities, including schools and parks/recreation facilities. After much deliberation, the Committee was unable to reach a consensus on the appropriate future residential densities along DeLong Street. The City, therefore, decided, to leave the existing General Plan designations for DeLong Street intact.

PUBLIC/SEMI-PUBLIC ZONE STUDY AREA

Cypress has over 900 acres of land scattered throughout its jurisdiction which has been designated for Public/Semi-Public use (see Figure LU-9). Land uses within this category include publicly-owned uses (parks, government offices, and facilities), quasi-public uses (private golf courses, Los Alamitos Race Track, Forest Lawn Cemetery) and institutional facilities (schools and colleges).

The 1986 adopted General Plan Land Use Map differentiates between public and private ownership under the Public/Semi-Public land use designation, specifically identifying the Forest Lawn Cemetery, Los Alamitos Race Track, and Cypress Golf Course and Country Club as "Public/Semi-Public, Privately Owned." The Zoning Ordinance, on the other hand, does not differentiate between public and private ownership.

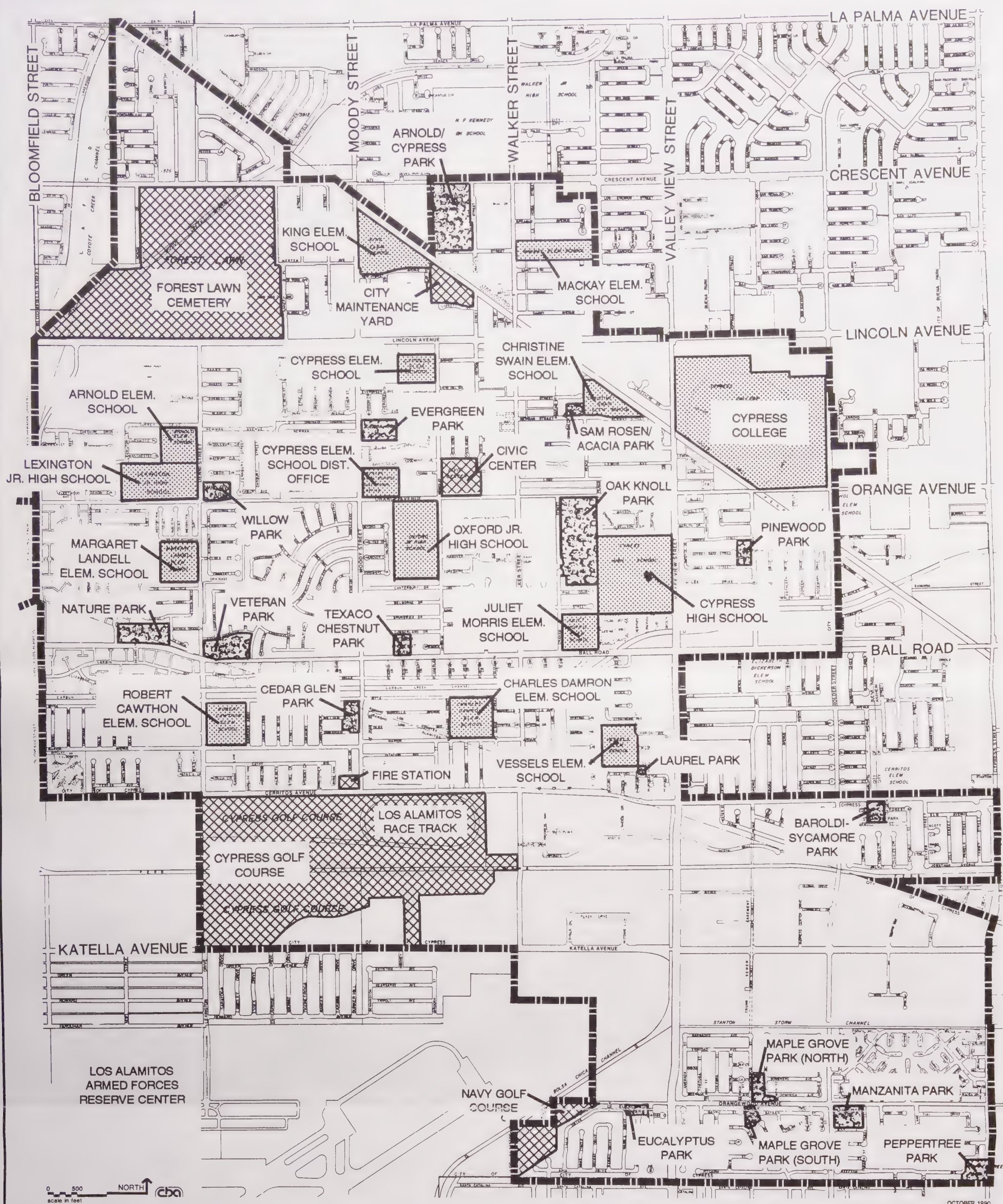
The Cypress Zoning Ordinance permits by right the following uses in the Public/Semi-Public (PS-1A) zone; farms or ranches including the sale of agricultural products; raising of certain livestock; and commercial or accessory uses incidental to permitted or conditional uses. All public and quasi-public uses are subject to a Conditional Use Permit within the PS-1A zone.

Issues for Consideration

- The primary issue is the continued appropriateness of the Public/Semi-Public land use classification as it currently applies to the wide range of land uses. In particular, should private land uses, such as the golf course, racetrack, and cemetery be removed from the Public/Semi-Public category to avoid any confusion among Cypress residents as to their non-public ownership?

Issue Area Policy Direction

The Committee initially recommended disaggregating the Public/Semi-Public land use designation into four or five discrete General Plan and zoning categories which more appropriately group comparable land uses. However, such a change was determined to constitute a modification to



- School or College
- Park
- Public Building/Community Facility

SOURCE: Cypress Department of Public Works,
Cotton/Beland/Associates, Inc.

CYPRESS

GENERAL PLAN UPDATE

Figure LU-9
Public/Semi-Public Zone
Study Area

property within the Public/Semi-Public Zone, and would trigger Measure D. (This measure requires a public vote when permitted uses within an area are altered). The Committee, therefore, recommends that the Public/Semi-Public zone be re-titled "Community Services and Facilities" in the General Plan Land Use Plan. To further distinguish uses within this category, the Land Use Policy map will separately identify the following uses as "subcategories:" educational facilities, parks, government facilities, golf course, race track, and cemetery, and specifically identify which of these uses are privately owned.

As for the Public/Semi-Public zone district (PS-14), the agricultural and farm related uses permitted by right in this zone are now for the most part obsolete and may be incompatible with urban development. The Committee, therefore, recommends incorporating a policy into the General Plan to review uses currently contained in this zone and consider dividing the zone into discrete categories with appropriate development regulations for each. While modification of the Zoning Ordinance would trigger Measure D, the Committee agrees that the current zone is no longer appropriate and should be modified at some point in the future.

LAND USE GOALS AND POLICIES

The Land Use Element's goals and policies direct future residential, commercial, and industrial growth in Cypress, while minimizing existing and potential land use conflicts. The goals and policies are designed to encourage:

- Balanced development
- Compatible and complementary development
- Revitalization of deteriorated land uses
- High quality urban design
- Coordination of development with public facilities and services

These goals and policies are designed to address issues affecting the entire City of Cypress. Specific goals and policies are also included to provide policy direction for the special study areas evaluated by the Citizen Advisory Committees.

BALANCED DEVELOPMENT IN CYPRESS

A well-balanced community provides employment, housing, and recreation opportunities for its residents. By encouraging a mix of land uses, the City can meet the housing needs of all income groups, enjoy a stable employment and tax base, and provide residents with suitable recreational opportunities.

GOAL 1: Create a well balanced land use pattern that accommodates existing and future needs for housing, commercial, and industrial land, while providing adequate recreation, and community services to City residents.

Policy 1.1: Preserve single-family neighborhoods in Cypress which are economically and physically sound.

Policy 1.2: Allow for multi-family infill in designated areas to satisfy regional housing needs.

Policy 1.3: Encourage mixed use development on Lincoln Avenue by providing incentives for senior citizen and multi-family housing.

Policy 1.4: Locate residential uses within close proximity of commercial centers to encourage pedestrian traffic, and to provide a consumer base for commercial uses.

Policy 1.5: Encourage the development of neighborhood-serving commercial uses in areas of Cypress presently underserved by such uses.

Policy 1.6: Encourage business parks as the preferred method of accommodating light industrial growth.

Policy 1.7: Where feasible, increase the amount and network of public and private open space and recreational facilities which will be adequate in size and location to be useable for active or passive recreation as well as for visual relief.

COMPATIBLE AND COMPLEMENTARY DEVELOPMENT

A variety of land uses enable a community to provide housing, employment, and recreation opportunities to City residents. However, many land uses are incompatible, such as residential and industrial development, due to the differences in traffic and noise levels, physical scale, and hours of operation. The following goal and policies establish guidelines for the relationship of land uses to ensure their compatibility.

GOAL 2: Ensure that new development is compatible with surrounding land uses, the circulation network, availability of public facilities, and existing development constraints.

Policy 2.1: Ensure a sensitive transition between commercial or business park uses and residential uses by implementing precise development standards with such techniques as buffering, landscaping, and setbacks.

Policy 2.2: Where residential/commercial mixed use is permitted, ensure compatible integration of adjacent uses to minimize conflicts.

Policy 2.3: Encourage non-conforming uses and buildings to be brought into compliance with City codes.

Policy 2.4: Mitigate traffic congestion and unacceptable levels of noise, odors, dust, and light and glare which affect residential areas and sensitive receptors, where feasible.

Policy 2.5: Monitor the impact and intensity of land uses in adjacent jurisdictions on Cypress' transportation and circulation systems, so that they are able to provide for the efficient movement of people and goods with the least interference.

Policy 2.6: Encourage consolidation of parking and reciprocal access agreements among adjacent businesses to minimize curb cuts and disruption of traffic flow.

Policy 2.7: Ensure adequate monitoring of those uses which utilize hazardous materials to avoid industrial accidents, chemical spills, fires, and explosions.

REVITALIZATION

While the majority of development in Cypress is in good physical condition, the City does contain a number of residential and commercial structures that are in need of rehabilitation or replacement. The City has adopted redevelopment plans to facilitate revitalization of the following areas: the Civic Center, Lincoln Avenue, and Los Alamitos Racetrack and Cypress Golf Course. These plans provide for the upgrading of primarily commercial, business park, commercial recreation uses and public facilities. The adopted Cypress Housing Element also establishes and supports a number of rehabilitation programs, including Community Development Block Grant, Rental Rehabilitation Program, and Home Weatherization Improvements, to rehabilitate residential units. The requirement for redevelopment agencies to set aside 20% of a project's tax increment for low and moderate income housing can provide a significant source of funding for implementation of Cypress' housing programs.

GOAL 3: Revitalize older commercial and residential uses and properties.

Policy 3.1: Encourage and continue the use of redevelopment activities in the Civic Center project area, on Lincoln Avenue, and on the Los Alamitos Racetrack and Cypress Golf Club.

Policy 3.2: Support the provision of incentives for private development (as appropriate), joint public-private partnerships, and public improvements through redevelopment actions.

Policy 3.3: Provide incentives to encourage lot consolidation and parcel assemblage to provide expanded opportunities for coordinated development.

Policy 3.4: Continue to provide rehabilitation assistance in targeted residential neighborhoods and commercial districts to eliminate code violations and enable the upgrading of residential and commercial properties.

Policy 3.5: Encourage vigorous enforcement of City codes, including building, safety, and housing codes, to promote property maintenance.

IMPROVED CITY-WIDE URBAN DESIGN

Urban design influences how residents and visitors perceive a community. Many factors contribute to a City's design, including compatibility of development, transitions between land uses, and landscaping. The following goal and policies outline policy direction for Cypress to attain a quality urban environment.

GOAL 4: Improve urban design in Cypress to ensure development that is both architecturally and functionally compatible and to create uniquely identifiable neighborhoods, commercial and business park districts.

Policy 4.1: Develop citywide visual and circulation linkages through strengthened landscaping, pedestrian lighting, and bicycle trails.

Policy 4.2: Encourage development projects to utilize high quality design for a structure's physical appearance.

Policy 4.3: Upgrade the image of Lincoln Avenue through improving the overall appearance of existing buildings, streets, and parking areas.

Policy 4.4: Preserve Cypress' low density residential neighborhoods through enforcement of land use and property development standards to create a harmonious blending of buildings and landscape.

Policy 4.5: Improve the quality of Cypress' multi-family neighborhoods through a) improved buffers between multi-family residences, and commercial and business park lands; b) provision of usable private and common open space in multi-family projects; c) increased code enforcement; and d) improved site, building, and landscape design.

Policy 4.6: Continue to emphasize the Civic Center as the focal point of the community, civic, cultural, and recreational activities.

Policy 4.7: Review and revise, as necessary, the City's development standards to improve the quality of new development in Cypress and to protect the public health and safety.

COORDINATE DEVELOPMENT WITH PUBLIC FACILITIES AND SERVICES

Future development in Cypress is somewhat limited because of the few remaining large acreages of vacant land. However, new construction will still occur through buildout of the Business Park and through infill development. As new development occurs, public facilities and services will need to be upgraded to handle the increased employee and resident population of Cypress.

GOAL 5: Ensure that public facilities and services are available to accommodate development permitted under the Land Use Policy Map.

Policy 5.1: Encourage within economic capabilities a wide range of accessible public facilities and community services, including fire and police protection, flood control and drainage, educational, cultural and recreational opportunities and other governmental and municipal services.

Policy 5.2: Define needs and deficiencies that are within the City and introduce priority projects into the City's budget process.

Policy 5.3: Coordinate and collaborate with other agencies providing public utility service to Cypress to define areawide and regional needs, projects and responsibilities.

Policy 5.4: Coordinate the construction of all public utilities to minimize disruption of vehicular traffic and negative impacts on roadways.

Policy 5.5: Continue to make incremental improvements to the flood control and drainage system.

Policy 5.6: To ensure an orderly extension of essential services and facilities, and preservation of a free-flowing circulation system, continue to require provision of essential facilities and services at the developer's expense where these systems do not exist or are not already part of the City's financed capital improvement program.

LINCOLN AVENUE STUDY AREA

Like most strip commercial corridors throughout Southern California, Lincoln Avenue lacks a clearly defined land use pattern. A wide variety of low intensity commercial uses are interspersed along Lincoln Avenue, with no particular nodes of concentrated activity. Many goods and services desired by community residents are not available on Lincoln Avenue, or elsewhere in the City, thereby requiring residents to shop outside their City.

GOAL 6: Enhance the visual image and economic vitality of the Lincoln Avenue corridor.

Policy 6.1: Develop and adopt a Specific Plan for Lincoln Avenue as a means of further defining and implementing an

urban design plan for the corridor. The purpose of the Specific Plan will be to provide a more detailed specification of the types of uses to be permitted, and to establish integrated development standards related to building heights and architecture.

Policy 6.1.1: Conduct an economic/real estate feasibility study of Lincoln Avenue to assess market support and determine the appropriate mix of land uses to be included in the Specific Plan.

Policy 6.1.2: Encourage the creation of development focal points at key locations along Lincoln Avenue. Establish as top priority the creation of activity nodes at the western and eastern gateways into the City.

Policy 6.1.3: Create a strong urban design statement along Lincoln Avenue as a means of unifying fragmented land uses. Provide for use of the following elements:

- Streetscape improvements
- Median landscaping
- Gateway treatment
- Unified architecture

Policy 6.1.4: Utilize the following urban design components to provide visual "linkages" between land uses:

- Monument signs - public and private
- Street furniture/Benches
- Sidewalk and pavement treatment
- Landscape/Trees/Flowers
- Lighting
- Banners
- Public art
- Kiosks

Policy 6.1.5: Encourage pedestrian activity along Lincoln Avenue through use of the following elements: pedestrian amenities, such as benches, trash receptacles and signage oriented to the pedestrian; design amenities related to the street level, such as awnings and arcades; building frontages which provide visual interest; and extensive landscaping, including trees, flowering shrubs and ground cover.

Policy 6.1.6: Monitor development activity along Lincoln Avenue, and re-evaluate the mix of land uses and development incentives provided for in the Specific Plan every five years to ensure realization of General Plan policies.

Policy 6.2: Utilize redevelopment authorities to facilitate the revitalization of Lincoln Avenue. Encourage lot consolidation to achieve more cohesive development projects.

Policy 6.3: Encourage the development of multi-family residential both adjacent to and above ground floor commercial/retail as a means of stimulating pedestrian activity on the corridor and providing market support for commercial uses.

Policy 6.4: Review the City's zoning ordinance to evaluate replacement of the "Lincoln Avenue Combining Zone" designation with "Commercial/Residential Mixed Use". The mixed use designation will specifically identify permitted uses based on the Specific Plan.

ANNEXATION STUDY AREA

The Crescent/Lincoln area was annexed into Cypress in 1988. Having developed under the jurisdiction of the County, development standards are inconsistent with current City standards. Of particular concern are transition of the District 8 neighborhood from single to multi-family densities, and preservation of the unique rural character in the Gay and Denni Street neighborhood.

GOAL 7: Address compatibility issues related to multi-family residential infill in District 8.

Policy 7.1: Encourage multi-family development to provide adequate buffers (such as decorative walls and landscaped setbacks) at the designated boundaries with adjacent single-family residential uses, as appropriate, so as to prevent impacts on residences due to noise, traffic, parking, light and glare, and differences in scale; to ensure privacy; and to provide visual compatibility.

Policy 7.2: Ensure adequate infrastructure improvements are provided to support increased development.

Policy 7.3: Establish an amortization period for the eventual elimination of farm animals in the District.

GOAL 8: Preserve the rural ambience of the Gay and Denni Street area, and encourage the upgrading of existing properties.

Policy 8.1: Adopt a Planned Residential Development (PRD) overlay for the area to allow for more than one unit per lot as a means of encouraging investment. Modify the PRD overlay zone to accommodate the area's smaller lot sizes.

Policy 8.2: Provide standards in the PRD zone to avoid overbuilding on lots, and to maintain the area's single-family streetscape.

Policy 8.3: Target public investment in the area to upgrade infrastructure to support additional development.

Policy 8.4: Conduct a code enforcement program to seek compliance to improve property and building maintenance.

CYPRESS BUSINESS PARK

The 587-acre Cypress Business Park represents the single largest remaining development opportunity in the City. A series of five specific plans have been adopted to govern future development in the area. Although the Business Park has not yet been developed to its full potential, the area is already experiencing traffic impacts.

GOAL 9: Carefully regulate future development in the Business Park to ensure the current high quality environment is maintained.

Policy 9.1: Review current business park standards contained in the City's Zoning Ordinance, and revise as necessary to provide improved site development criteria.

Policy 9.2: As a condition of development approval in the Business Park, consider the impacts of site utilization and occupancy on traffic generation.

Policy 9.3: Encourage use of alternative modes of transportation through implementation of the Cypress Business Park Trip Reduction Ordinance.

Policy 9.4: Coordinate with adjacent jurisdictions to pursue Measure M funding for automated traffic signal control on Valley View Street and Katella Avenue to improve traffic flow in the Business Park.

Policy 9.5: Support the Orange County Congestion Management Program which requires traffic impact studies be prepared for most development proposals.

Policy 9.6: Provide redevelopment assistance to enable needed improvements to circulation, drainage and sewer systems in the Los Alamitos Race Track and Cypress Golf Club, and to support business park development in the area.

WICKER DRIVE STUDY AREA

The Wicker Drive Study Area represents a significant opportunity to enhance the focal point of the downtown Civic Center core. City/Agency ownership of the majority of this five-acre parcel provides a variety of land use options.

GOAL 10: Encourage the development of Wicker Drive with community-oriented uses which provide linkage with the adjacent Civic Center.

Policy 10.1: Study the feasibility of developing public uses on the Wicker Drive site, and pursue City/Agency ownership of the entire Wicker Drive Study Area.

Policy 10.2: Provide consistent landscaping and streetscape design along the Orange Avenue frontage to enhance the visual connection with the Civic Center.

Policy 10.3: Ensure the compatibility of development on Wicker Drive with the single-family residences to the north.

Policy 10.4: Preserve landmark trees in the area, including the significant California Sycamore tree on Orange Avenue.

DELONG STREET STUDY AREA

The medium density General Plan and zoning designations on the eastern block of DeLong Street provide for the recycling of single-family uses to multi-family residential. The City will need to ensure that multi-family infill projects are designed in a manner sensitive to existing single-family residences.

GOAL 11: Ensure new development on DeLong Street is compatible with and complements existing residential land uses.

Policy 11.1: Require that multi-family development provide adequate buffers (such as decorative walls and landscaped setbacks) at the designated boundaries with adjacent single-family residential uses.

Policy 11.2: Ensure that new development provide adequate ingress and egress onto DeLong, Walker and Watson streets to minimize potential circulation impacts.

PUBLIC/SEMI-PUBLIC STUDY AREA

The Public/Semi-Public designation in the City's 1986 General Plan encompassed a variety of land uses, including parks, educational facilities, public buildings, and community facilities. The wide range of land uses contained under the Public/Semi-Public designation, combined with the non-public ownership of the golf course, race track and cemetery, has resulted in some confusion as to the City's control of Public/Semi-Public land uses.

GOAL 12: Provide clarification in the General Plan as to the City's authority over public and private-owned community facilities and services.

Policy 12.1: Retitle the "Public/Semi-Public" designation as "Community Services and Facilities", and differentiate the various land uses in this category on the Land Use Policy Map.

Policy 12.2: Expand the description of uses encompassed under the "Community Services and Facilities" category, and identify uses which are under private ownership.

Policy 12.3: Review land uses currently permitted in the PS-1A (Public/Semi-Public) zone in the City's Zoning Ordinance, and consider subdividing the PS-1A zone into discrete use categories with appropriate development regulations for each.

LOS ALAMITOS ARMED FORCES RESERVE CENTER

The approach pattern to the Los Alamitos Army Airfield crosses the southern portion of Cypress. The General Plan policies are created to ensure that appropriate land uses are allowed within the flight pattern.

GOAL 13: Establish land use patterns which protect the public from impacts (noise, potential accidents) associated with the Los Alamitos Army Airfield of the Armed Forces Reserve Center.

Policy 13.1: Prohibit any structure in Cypress that is determined to be a "hazard" by the FAA because the proposed structure:

- Would raise the ceiling or visibility minimums at an airport for an existing or planned instrument procedure (i.e., a procedure consistent with the FAA-approved airport layout plan or a proposed procedure formally on file with the FAA);
- Would result in a loss in airport utility, such as causing the usable length of the runway to be reduced;
- Would conflict with the VFR air space used for the airport traffic pattern or enroute navigation to and from the airport.

Policy 13.2: Coordinate with the Airport Land Use Commission to ensure consistency with the scope and intent of the Airport Land Use Commission Law (Public Utilities Code Section 21670, et seq.)

Policy 13.3: Continue to prohibit new residential development on existing vacant land within the 65 CNEL contour of the Los Alamitos Army Airfield of the Armed Forces Reserve Center.

LAND USE PLAN AND POLICY MAP

The Land Use Plan and Policy Map describe the location and extent of future development in Cypress. A description of the type of land uses permitted and the intensity of development are explained in the Land Use Element, and the locations of these future land uses are presented in the Land Use Policy Map. The Element focuses on the following land use characteristics of Cypress:

- 1) Vacant parcels of land that are available for new development.
- 2) Existing land uses which, over time, will require maintenance.
- 3) Revitalization or redevelopment of land uses where rehabilitation is necessary.

LAND USE POLICY CONSIDERATIONS

Cypress is located in an urban environment which encompasses a variety of land uses, including residential, commercial, industrial, and public uses. Both the benefits and disadvantages of the City's development patterns are recognized in the Land Use Element. Land use policy under the General Plan does not propose drastic, large-scale changes to the City's built environment. Rather, the goals and policies intend to ensure balanced and compatible development, and revitalization of the City's lands.

A wide range of factors are considered during the formulation of the land use policy. Areas of concern include many issues, such as man-made or natural hazards, environmentally sensitive lands, and biological resources. These issues are thoroughly examined in the Safety, Conservation/Open Space/Recreation Elements contained in the Cypress General Plan.

Few natural or manmade hazards threaten Cypress, as evidenced in the Safety Element. No active faults traverse the City, and the hazards resulting from seismic events are also minimal. However, Cypress may experience liquefaction given

the relatively high water table and soil conditions in the City. Also, structures lacking adequate reinforcement, especially concrete tilt-ups constructed prior to 1974, may sustain damage during an earthquake.

The absence of hillsides and open space areas eliminate the hazards associated with hillside development, such as landslides and wildland fires. Flooding concerns are also minimal, as the community has adequate facilities to accommodate a 100 year flood. The City may, however, experience flooding due to dam failures.

Man-made hazards resulting from human actions are minimal. These hazards in Cypress are primarily associated with the transportation of hazardous materials or aircraft overflight. Hazards from the transport of hazardous materials is significantly diminished through land use policies. For example, the Cypress Business Park contains research and development activities that may utilize hazardous materials; however, these uses are located safe distances from residential uses. In addition, setback standards along the City's major arterials decreases the impact of a possible ground transportation-related (automobile/truck) hazardous materials spill on structures aligning the City's arterials.

Cypress lies within the flight pattern for the Los Alamitos Army Airfield of the Armed Forces Reserve Center, which is used by various military aircraft including helicopters. The possible release of materials or an aircraft accident creates a potential hazard area within the community. The City has followed accepted guidelines regarding maximum building height and other restrictions to minimize the potential hazards resulting from aircraft.

Environmentally sensitive lands and biological resources are generally examined in the Conservation/Open Space/ Recreation Element. The City of Cypress does not contain any significant animal, plant, or open space resources. Plants are limited to landscaping and open space areas are the City's parks. The City has adopted an Ordinance to preserve landmark trees in the community.

LAND USE DESIGNATIONS

Land use designations indicate the type and nature of development that is permitted in a given location. While terms like "residential", "commercial", and "industrial" are generally understood, State General Plan law requires a clear and concise description of land use categories depicted on the Land Use Policy Map.

The Land Use Element contains nine land use categories which are listed in Table LU-4. Four of these categories are established for residential development, ranging from low density residential to high density residential uses and mobile home parks. Two commercial and industrial designations, and a public category are also included.

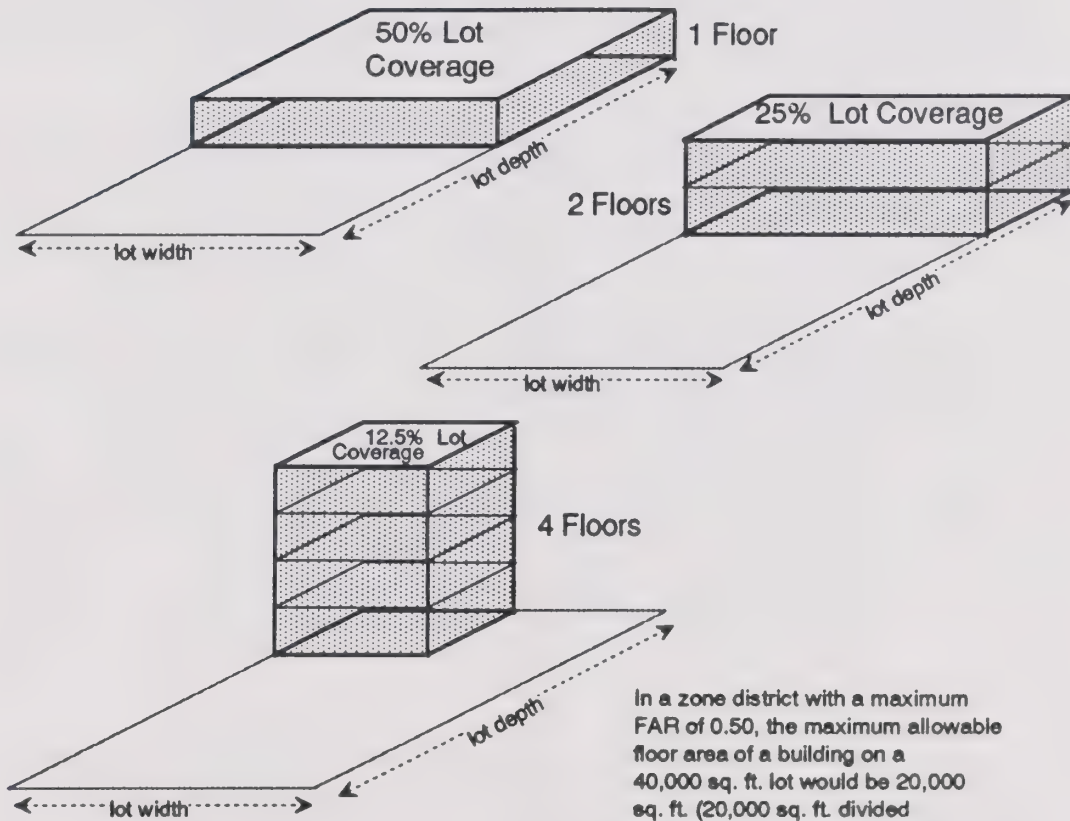
Land Use Intensity/Density

State General Plan law requires that the Land Use Element indicate the maximum intensities/densities allowed in a City. The Cypress Land Use Element contains nine land use designations; each category describes permitted uses and the corresponding intensities/densities standards (See Table LU-4). These standards establish the maximum allowable development intensity on a particular parcel. Table LU-4 also includes the standard or expected overall levels of development within each land use designation on a city-wide basis. These expected levels of development represent an anticipated intensity/density and are, therefore, less than the maximum allowed. For various reasons, many parcels are not developed to their full potential as evidenced in the Cypress Business Park.

A number of terms are utilized to define the land use designations or categories described in this element. The term "intensity" refers to the degree of development based on building characteristics such as height, bulk, floor area ratio, and percent or lot coverage. Intensity is most often used to describe non-residential development levels.

For most non-residential land use categories (commercial, industrial, and public), the measure of intensity as "floor area ratio" (FAR) provides the most convenient method of describing development levels (see Figure LU-10). The floor

Possible Building Configurations for 0.50 FAR



In a zone district with a maximum FAR of 0.50, the maximum allowable floor area of a building on a 40,000 sq. ft. lot would be 20,000 sq. ft. (20,000 sq. ft. divided by 40,000 sq. ft. equals .50).

NOTE: Variations may occur if upper floors are stepped back from ground level lot coverage.

$$\text{Floor Area Ratio (FAR)} = \frac{\text{Gross Building Area (All Floors)}}{\text{Lot Area}}$$

area ratio is the relationship of total gross floor area of all building on a lot to the total land area of that lot expressed as a ratio. For example, a 21,780 square foot building of a 43,560 square foot lot (one acre) yields an FAR of .50:1 as illustrated in Figure LU-10. The FAR describes use intensity on a lot, but not the actual building height, bulk or coverage. As Figure LU-10 shows, a .50:1 FAR can yield a building of one story in height covering one half of the lot area, or a taller building which covers less of the lot and provides more open space.

The term "density," in a land use context, is a measure of the population or residential development capacity of the land. Density is described in terms of dwelling units per gross acre (du/ac); thus, the density of a residential development of 100 dwelling units occupying 20 acres of land is 5.0 du/acre. A dwelling unit is a building or a portion of a building used for human habitation and may vary considerably in size (square footage) from small apartments at 400-500 square feet to large single family homes exceeding 5,000 square feet. Along with this difference in size is a corresponding difference in the number of persons occupying a given unit (i.e., larger units usually house more persons than smaller units). For purposes of calculating population, an average number of persons per dwelling unit for all dwelling unit types and sizes is assumed. Within land use plans, density is often described as a range (i.e., 8-15 du/acre).

Descriptions of each of the land use designations depicted on the Land Use Policy Map are provided to delineate the general types of uses allowed and their corresponding intensities or densities. These use descriptions, types, and limitations are further defined as specific uses within the City's Zoning Ordinance.

Land Use Categories

Low Density Residential: The Low Density Residential land use designation provides for the development of low density detached single-family dwellings. The maximum density allowed under this designation is five units per acre. Uses such as public/institutional facilities, churches, schools, and others, which are determined to be compatible with, and oriented toward serving the needs of low density detached single-family neighborhoods, may also be allowed. The

average density for this residential designation is approximately 3.35 persons per dwelling unit.

Medium Density Residential: The Medium Density Residential designation provides for the development of medium density duplexes, townhomes, condominiums and apartments, in addition to permitting low density single-family development. This land use designation allows for a maximum of 15 dwelling units per gross acre. Uses such as public/institutional facilities, churches, schools, and others, which are determined to be compatible with, and oriented toward serving the needs of medium density residential neighborhoods, may also be allowed. The average density for this residential designation is approximately 2.8 persons per dwelling unit.

High Density Residential: The High Density Residential land use designation allows for the development of apartments, condominiums, townhouses and other group dwellings in addition to single-family development at maximum densities of 20 units per gross acre. Uses such as public/institutional facilities, churches, schools, and others, which are determined to be compatible with and oriented toward serving the needs of high density neighborhoods, may also be allowed. The average density for this residential designation is approximately 2.5 persons per dwelling unit.

Mobile Home Park: The Mobile Home Park land use designation provides for the development of mobile home parks subject to certain zoning restrictions. This designation allows for a maximum of 12 dwelling units per gross acre of land with an average density of approximately 2.0 per dwelling unit.

General and Neighborhood Commercial: The General and Neighborhood Commercial designation includes retail, professional office, and service-oriented business activities, encompassing both local-serving and broader community-serving uses. The types of uses allowed within this designation include, but are not limited to: professional and administrative offices; convenience and neighborhood commercial developments; restaurants; community shopping centers; retail and wholesale commercial activities; and light industrial in conjunction with commercial uses. The maximum intensity of development is a FAR of 0.5:1.

Lincoln Avenue Specific Plan Overlay: This overlay designation is intended to provide development flexibility within the Lincoln Avenue Corridor, and provide economic inducements for revitalization. A Specific Plan will be developed for Lincoln Avenue which specifies density bonuses and other incentives for the development of uses and design features to facilitate upgrading of the area. The development of larger scale uses, such as furniture, appliance and retail outlets, theaters and entertainment is encouraged, as are groupings of complementary uses, such as restaurants and specialty retail. Multi-family residential shall be specifically encouraged as a means of stimulating activity on the corridor.

Properties within the corridor may be granted additional FAR development intensities above those permitted by the underlying General Plan designation. An "FAR Reserve" will be utilized as a tool to encourage development under the Specific Plan. The reserve will allow for development of up to 1.0:1 FAR along the entire corridor, with individual properties eligible for increased intensities as delineated in the Specific Plan. Given the built out nature of Lincoln Avenue, the overall level of development is expected to average 0.5:1 FAR along the corridor. The City will closely monitor development along Lincoln Avenue to ensure the incentives established in the Specific Plan are achieving General Plan policy (refer to Policy 6.1.6).

Business Park: The Business Park designation is intended to foster the development of large scale, planned commercial and industrial projects. To ensure compatibility of land uses permitted within the classification with the character of surrounding development, and within a development area, the location, land use type, density and building intensity standards will be specifically governed by the adoption of a Specific Plan, or by standard zoning mechanisms. The maximum intensity of development is a FAR of 1.0:1 on a given parcel; the Business Park Specific Plans more precisely define permitted development within the Business Park.

Light Industrial: The Light Industrial designation is designed to accommodate a variety of light industrial uses which are non-polluting and which can co-exist with surrounding land uses. Permitted uses would include but not be limited to wholesale businesses, light manufacturing, warehousing and product distribution, storage, and related uses. Obnoxious,

heavy industrial uses are not permitted in this category. The maximum intensity of development is a FAR of 0.5:1.

Community Facilities and Services: The Community Facilities and Services designation includes a wide range of public and private uses that are necessary to support the community by providing educational, cultural and functional opportunities. Land uses within this category include publicly-owned uses (parks, government offices and facilities), privately-owned community facilities (private golf courses, race tracks, cemeteries) and institutional facilities (schools and colleges). The maximum intensity of development is a FAR of 0.5:1.

General Plan/Zoning Relationship

As a charter City, Cypress has no explicit requirement to ensure that zoning is consistent with the General Plan. However, in the interest of sound planning, the City has designed its Zoning Ordinance and General Plan to be consistent.

The relationship between the Cypress General Plan land use designations and zone districts are listed in Table LU-3. This table indicates how properties citywide should be zoned to be consistent with the land use policy map. As presented in the table, there are nine General Plan land use categories and eighteen zoning categories.

GENERAL PLAN LAND USE
DESIGNATIONS

Table LU-4
General Plan/Zoning Relationship

ZONING CATEGORIES

	Low Density Residential	Medium Density Residential	High Density Residential	Mobile Home Park	General and Neighborhood Commercial	Lincoln Avenue Specific Plan	Light Industrial	Business Park	Community Facilities and Services
RS-15,000 Residential Single-Family	●								
RS-6,000 Residential Single-Family	●								
PRD-5A Planned Residential Development	●	●	●						
PC-25A Planned Community Zone	●	●	●		●	●	●	●	●
RM-15 Residential Multi-Family		●							
RM-20 Residential Multi-Family			●						
MHP-20A Mobile Home Park				●					
OP-10,000 Office Professional					●				
CN-10,000 Commercial Neighborhood					●				
CN-10,000 Commercial General					●				
PCM-Planned Commercial/Light Industrial					●		●		
CH-10,000 Commercial Heavy					●		●		
Commercial/Residential Mixed Use						●			
ML-10,000 Industrial Light							●		
BP-20,000 Business Park								●	
PBP-Planned Business Park Industrial								●	
PC-Planned Community Business Park								●	
PS-1A Public and Semi-Public									●

IMPLICATIONS OF THE LAND USE PLAN

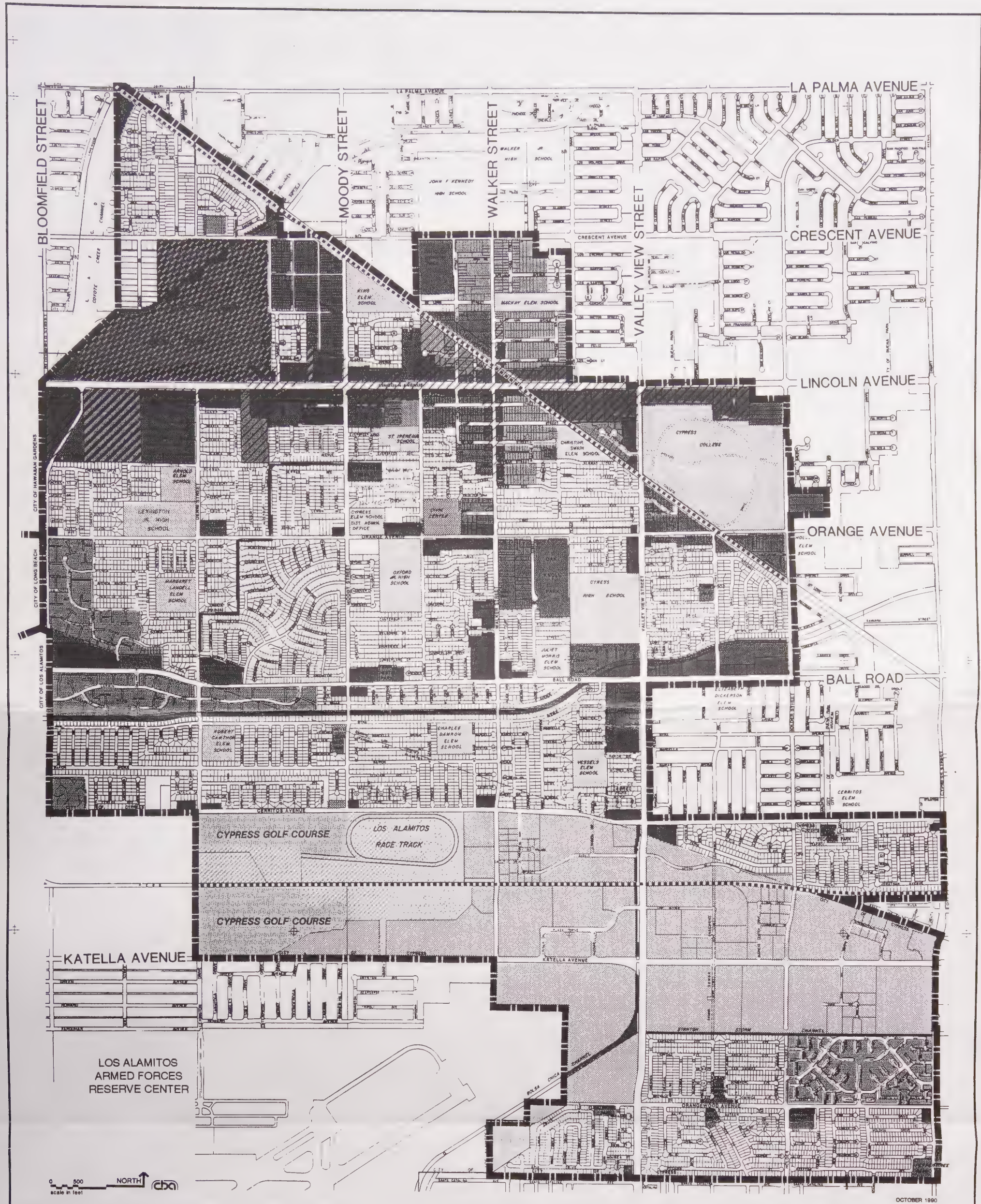
Future development in Cypress is directed by the Land Use Element which contains a map and text describing the community's future. The Cypress Land Use Policy Map (See Figure LU-11) presents the distribution of land uses in the City. Total acreages for each of these land use designations are presented in Table LU-4. The table also provides estimates of the total number of residential dwelling units planned and the resulting population. For commercial and industrial land uses, estimates of building square footage at General Plan buildout are included. The estimates are based on the Average Density/Intensity factors listed in Table LU-4.

Residential

The Element accommodates a range of residential densities from low to high density development. These densities are generally compatible with existing residential developed densities. However, multi-family residential development is now permitted between Belmont and La Salle streets to aid the community in achieving its regional housing needs. The Land Use Policy Map also permits residential development along Lincoln Avenue to reduce reliance on the automobile and provide housing that is convenient to shopping and employment opportunities. Low density single-family neighborhoods will continue to be preserved under the General Plan's policies.

The maximum residential densities allowed under the General Plan are not guaranteed by right for any land use category, but rather represent the maximum densities permitted after specific performance standards are met. The following criteria will be used to help determine the maximum residential density permitted on any particular property:

- Compatibility with surrounding land uses;
- Adequacy of public infrastructure (i.e., water lines, sewer lines, storm drains, and utility systems) and public services (i.e., fire protection, law enforcement, educational facilities, and hospitals);
- Proximity to commercial areas;



CYPRESS GENERAL PLAN UPDATE

NOTE: Floor Area Ratios (FAR) are maximums for individual parcels.

Figure LU-11
Land Use Policy Map

**TABLE LU-4
LAND USE POLICY IMPLICATIONS**

Land Use Category and Maximum Permitted Density/Intensity	Average Density or Intensity Factor ^a	Net Acreage	Potential Dwelling Units (du)	Population Forecast	Potential Square Footage
Low-Density Residential (0-5 du/gross acre)	5	1,288	6,440	21,574	-
Medium Density Residential (5.1 - 15 du/gross acre)	15	239	3,580	10,038	-
High Density Residential (15.1 - 20 du/gross acre)	20	206	4,120	10,300	-
Mobile Home Park (0-12 du/gross acre)	12	32	380	768	-
General and Neighborhood Commercial (0.5:1 FAR)	0.4:1	119	-	-	2,100,000
Lincoln Avenue Specific Plan Overlay (1.0:1 FAR) ^b	0.5:1	141	880	2,200	2,300,000
Business Park (1.0:1 FAR) ^c	0.5:1	587	-	-	12,400,000
Light Industrial (0.5:1 FAR)	0.4:1	6.4	-	-	112,000
Community Facilities and Services (0.5:1 FAR) ^d	0.4:1	876	-	-	5,489,000
TOTAL			15,400	44,880	22,401,000

^a Projected overall levels of development on a Citywide basis at General Plan buildout. Because much of the City is already developed at residential densities at or above those permitted by the Plan, the average residential density corresponds with maximum permitted density on a given parcel. Development trends in commercial and industrial areas, however, exhibit overall densities somewhat below the permitted maximum.

^b Development maximum for entire Lincoln Avenue Corridor is 1.0:1 FAR - the Lincoln Avenue Specific Plan will define development entitlement on individual parcels. The anticipated level of development for the entire corridor at General Plan buildout is 0.5:1 FAR for the commercial component (75% of net acreage), and 25 du/acre for the residential component (25% of net acreage).

^c Buildout in the Business Park reflects development entitlements permitted under adopted Specific Plans.

^d Acreage in Community Facilities and Services includes 544 acres of race track, parks, cemetery, drainage facilities and golf course. These uses have minimal building square footage.

- Access and proximity to major streets;
- Adequacy of parking;
- Adequacy of neighborhood-serving open space and recreation; and
- Mitigation of negative environmental impacts, such as noise, traffic, and light and glare.

Table LU-4 depicts the quantitative results of the Land Use Policy Map based on potential buildout. Each land use designation is listed with its average density/intensity factors and associated net acres. Each residential land use designation also includes a maximum potential population based on an average persons per dwelling unit. Based on current household size information derived from the 1990 census, and factoring in long-term trends of smaller households, the following average persons per dwelling unit are assumed for Cypress: 3.35 for Low Density Residential, 2.8 for Medium Density Residential, 2.5 for High Density Residential, and 2.0 for Mobile Home Park. The residential component along Lincoln Avenue is assumed at an average of 25 du/acre, although higher densities may be granted pursuant to the Specific Plan.

Residential buildout at densities prescribed under the City's General Plan would result in 15,400 dwelling units, with an associated population of 44,880 residents. While the Plan provides for several residential development opportunity areas, the Plan's 15,400 dwelling-unit buildout represents approximately 860 additional dwelling units citywide than currently exist, reflecting the City's highly developed character. Residential development will primarily be accommodated through intensification of residential uses in some low density neighborhoods, buildout of the 671-unit Sorrento project, and through integration of multi-family units on Lincoln Avenue.

Commercial

The General Plan accommodates growth in the commercial sector of Cypress which includes Lincoln Avenue and other commercial areas citywide. All commercial uses within the City are to be designated as General and Neighborhood

Commercial which has an average development intensity of 0.4:1 FAR.

Properties within the Lincoln Avenue Specific Plan overlay may be granted additional FAR development intensities above those permitted by the underlying General Plan designation. An "FAR Reserve" will be utilized as a tool to facilitate the development of specific land uses and larger scale projects consistent with General Plan and Redevelopment Plan goals and policies. The reserve will accommodate development of up to 1.0:1 FAR along the entire Lincoln Avenue Corridor. Individual properties may be eligible for intensities above 1.0:1 FAR (as defined by the Specific Plan), but the aggregate development along the corridor can not exceed this FAR ceiling. The purpose of this approach is to encourage the types of development appropriate to Lincoln Avenue by providing the incentive of increased density.

An economic/real estate feasibility study, followed by a Specific Plan, will be developed for Lincoln Avenue within nine to twelve months after General Plan adoption. The Specific Plan will more precisely define the land uses, development standards, and development incentives to be established for Lincoln Avenue, including the structure of the FAR development incentives program.

Since the majority of land designated for commercial uses has already been developed, the recycling of properties is anticipated through time. This Land Use Element covers a time frame of ten to twenty years. Applicable goals and policies are intended to be continually implemented well into the future in subsequent updates of the Land Use Element. Therefore, many properties that are currently underdeveloped or improperly utilized will be recycled and redeveloped at higher densities in accordance with the land use policy.

Industrial

Industrial areas in Cypress include both light industrial and business park development. No additional development is anticipated to occur in the light industrial areas of the community. This use has an average development intensity of 0.4:1 FAR.

The Cypress Business Park encompasses a total of 587 acres of which approximately half has been developed. Remaining vacant and agricultural acreages in the business park will be developed in accord with the specific plans adopted for the area. Based on the development entitlements under the approved specific plans in the Business Park, a total of 12.4 million square feet of development can be developed, equating to an overall average of 0.5:1 FAR. However, based on economic trends which have resulted in development below the maximum entitlement, combined with development constraints (such as height restrictions imposed by the Los Alamitos Army Airfield), total buildout in the Business Park will likely be well below 12.4 million square feet.

Community Facilities and Services

All existing Community Facilities and Services uses will be retained under the General Plan. This use has an average development intensity of 0.5:1 FAR.

CYPRESS



GENERAL PLAN
U P D A T E

Housing

Element

CYPRESS

GENERAL PLAN

U P D A T E

CITY OF CYPRESS

GENERAL PLAN

HOUSING ELEMENT

DECEMBER, 1990

Amended December, 1991

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1.0 INTRODUCTION

The City of Cypress, incorporated as a small dairy community in 1956, is a relatively young suburban community located in northwestern Orange County. Soon after incorporation, Cypress began a period of rapid residential growth, with numerous single-family housing tracts built in the 1960s and 1970s. With only limited vacant land available for additional development, the majority of recent residential growth in the City has occurred through the recycling of underutilized properties, particularly in two County areas which were annexed to the City in the 1980s. The most significant remaining development opportunity in Cypress will be provided through recycling of a 144-acre oil storage tank farm site for single-family housing.

This Housing Element is intended to guide residential development and preservation in a way that coincides with the overall economic and social values of the community. The residential character of a city is largely dependent on the type and quality of its dwelling units, their location, and such factors as maintenance and neighborhood amenities. The Housing Element is an official municipal response to a growing awareness of the need to provide housing for all economic segments of the community, as well as legal requirements that housing policy be made a part of the planning process. As such, the Element establishes policies that will guide City officials in daily decision making and sets forth an action program designed to enable the City to realize its housing goals.

1.1 State Policy and Authorization

The California State Legislature has identified the attainment of a decent home and a satisfying environment for every Californian as the State's major housing goal. Recognizing that local planning programs play a significant role in the pursuit of this goal, and to assure that local planning effectively implements statewide housing policy, the Legislature has mandated that all cities and counties include a housing element as part of their adopted local general plans. Section 65302(c) of the Government Code sets forth the specific components to be contained in a community's housing element. Attachment A summarizes these State requirements and identifies the applicable sections in the Cypress Housing Element and Technical Data Report where these requirements are addressed.

Article 10.6 was added to the Government Code in 1980 and incorporates into law the Housing Element Guidelines promulgated by the California Department of Housing and Community Development (HCD). The original Housing Element Guidelines were adopted on June 17, 1971, and revised guidelines were adopted on November 17, 1977.

The Government Code specifies the intent of the Legislature to insure that counties and cities actively participate in attaining the state housing goal, and sets forth specific components to be contained in a housing

element. These include the identification and analysis of existing and projected housing needs, resources and constraints; a statement of goals, policies, quantified objectives, and scheduled programs for the preservation, improvement and development of housing; identification of adequate sites for housing; and adequate provision for the existing and projected needs of all economic segments of the community.

1.2 Organization of the Housing Element

The Housing Element Guidelines require elements to include two basic components:

1. An evaluation of the housing problem and an analysis of housing needs, indicating the capacity of the existing housing supply to provide all economic segments of the community with decent housing.
2. A housing program, consisting of two parts:
 - a. A comprehensive problem solving strategy establishing local housing goals, policies, and priorities aimed at alleviating unmet need and remedying the housing problem; and
 - b. A course of action which includes a specific description of the actions the locality is undertaking and intends to undertake to effectuate these goals, policies, and priorities.

The Cypress Housing Element describes the City's housing needs and sets forth a program of action in accordance with State law. This first section of the Element defines the intent of the Housing Element, describes its relationship to State directives and other General Plan elements, and includes a description of the public participation and intergovernmental coordination utilized in its preparation. Section 2.0 of the Housing Element provides an overview of the present and projected housing needs of the City's households as defined by the Housing Element Technical Data Report, which serves as an appendix to the Element. This section also provides an analysis of potential constraints to meeting the City's identified housing needs and an evaluation of opportunities that will further the development of new housing. Section 3.0 of the Housing Element sets forth the goals and policies to address Cypress' identified housing needs. Finally, Section 4.0 establishes a comprehensive program strategy to implement the City's housing goals.

1.3 Relationship of the Housing Element to Other General Plan Elements

Concurrent with this update to the City's Housing Element, the Cypress General Plan is undergoing a comprehensive update. A major purpose of the updated General Plan is to achieve internal consistency among all elements. Together these elements will provide the framework for development of those facilities, services, and land uses necessary to address the needs and desires of City residents.

By undertaking a comprehensive update to the City's General Plan, background information and policy direction presented in one element is also reflected within other Plan elements. For example, residential development capacities established in the Land Use Element and constraints to housing development identified in the Safety Element are incorporated within the Housing Element. The Housing Element is thus interrelated with the other General Plan elements, and is entirely consistent with the policies and proposals set forth by the Plan.

1.4 Public Participation

Section 65583(c)(5) of the Government Code states that "The local government shall make diligent effort to achieve public participation of all economic segments of the community in the development of the housing element, and the program shall describe this effort."

The majority of the Housing Element's goals and policies were developed as part of the City's 1981 Housing Element which involved a high level of citizen participation. Preliminary goals and policies were mailed to specific target groups (e.g., homeowner associations, etc.), and commented on by these groups at a scheduled housing workshop. This afforded Cypress residents the opportunity to determine which City housing goals should be kept, dropped, changed or added. It is these goals and policies which were used as the basis for producing the 1981 Housing Element.

As part of the current Housing Element Update, these adopted goals and policies were evaluated in terms of their effectiveness and actual results in implementation. The goals and policies contained in this Housing Element reflect a revision to those previously adopted to incorporate what has been learned from the prior element and to adequately address the community's identified housing needs. A public workshop was conducted with the Cypress City Council to review the draft Housing Element goals, policies and programs.

One public hearing was held before the Cypress City Council on this revision to the Housing Element. Notification was published in the News Enterprise in advance of the hearing, and was also posted at the Cypress Community Center, the library, and at City Hall. Public hearings are also held annually on the City's participation in the Community Development Block Grant program of the County of Orange.

The City of Cypress intends to continue to cooperate with the Orange County Fair Housing Council and Orange County Housing Authority in promoting equal housing opportunity for all economic segments of the community.

2.0 SUMMARY OF HOUSING NEEDS, CONSTRAINTS AND OPPORTUNITIES

As part of this Housing Element update, a separate Technical Data Report was prepared which presents detailed background data pertaining to the population, socio-economic, and housing characteristics of the City of Cypress. The Technical Data Report serves as an Appendix to the Housing Element, and is available for review at City Hall and the Cypress Library. The City's current and projected housing needs are defined in detail in the Technical Report, providing direction in the development of goals, policies and programs to address these needs in the Housing Element.

This section of the Housing Element summarizes the findings of housing need from the Technical Data Report. In addition, certain constraints which may discourage the construction of new housing are evaluated, as well as opportunities that will further the development housing in the community.

2.1 Summary of Housing Needs

A number of factors will influence the degree of demand or "need" for new housing in Cypress in coming years. The four major "needs" categories considered in this Element include:

- Housing needs resulting from increased population growth, both in the City and the surrounding region;
- Housing needs resulting from the deterioration or demolition of existing units;
- Housing needs that result when households are paying more than they can afford for housing;
- Housing needs resulting from the presence of "special needs groups" such as the elderly, large families, female-headed households, households with a handicapped person, and the homeless.

2.1.1 Population Growth

The 1989 population of the City of Cypress was approximately 45,000 persons, ranking it 17th in size among Orange County's 27 municipalities. During the 1980s, Cypress experienced an average annual population growth rate of approximately 5 percent, slightly below that experienced Countywide. Much of the City's population growth, however, was due to the annexation of existing developed neighborhoods rather than new construction. The City's slowing population growth rate is indicative of the fact that Cypress is an established, more built out community with limited vacant land available for residential development.

Growth projections through the year 2010 indicate a further slowing in the City's population growth, with a total population increase of only 5.8 percent during the 1990-2010 period and a projected 2010 population of just over 48,000. The City's population is estimated to peak around the year 2000 at 50,000 and then to begin evidencing a downward trend. Explaining this decline is the trend toward fewer persons per household combined with a flattening out of new housing growth in Cypress.

2.1.2 Substandard Units

The accepted standard for housing rehabilitation needs is after 30 years. In 1989, only four percent of Cypress' housing stock was over 30 years old. However, in ten years, half of the City's housing will be over 30 years of age, indicating the need for continued housing maintenance to prevent widespread housing deterioration.

A windshield survey was conducted in October 1989 to evaluate the structural conditions of the City's housing stock. The survey focused on those areas of the City known to have concentrations of deteriorated units. These survey areas coincide with the City's four housing rehabilitation areas. (Refer to figure 2 in the Housing Element Technical Data Report.) The survey identified a total of 218 dwelling units in need of minor repairs, 51 dwelling units which were substandard, and nine units which required replacement.

The Housing Element sets forth policies and programs to encourage the maintenance of the City's housing stock. These policies include:

- Advocate the rehabilitation of substandard residential properties by homeowners and landlords.
- Utilize the City's code enforcement program to bring substandard units in compliance with City codes.
- Provide financial assistance to income-qualified households for the rehabilitation of substandard and deteriorating housing.
- Focus rehabilitation assistance in targeted areas to create substantive neighborhood improvement.

2.1.3 Affordability

State and Federal standards for housing overpayment are based on an income-to-housing cost ratio of thirty percent and above. Households paying greater than this amount will have less income left over for other necessities, such as food, clothing and health care. It is recognized, however, that upper income households are generally capable of paying a larger proportion of their income for housing, and therefore estimates of housing overpayment generally focus on lower income groups.

The Regional Housing Needs Assessment (RHNA) prepared by SCAG identifies housing overpayment for the City's lower income households.(a) According to the RHNA, an estimated 1,539 (or 44 percent) of Cypress' lower income households were paying more than 30 percent of their income for rent or mortgage payments as of January 1, 1988. Of these overpayers, 920 are classified as Very Low Income, and 618 are Low Income.

-
- (a) Lower income households are defined as households whose total gross income is less than 80 percent of the County median. "Lower income" encompasses both Very Low and Low Income groups.

The distinction between renter and owner housing overpayment is important because, while homeowners may overextend themselves financially to afford the option of home purchase, the owner always maintains the option of selling the home. Renters, on the other hand, are limited to the rental market and are generally required to pay the rent established in that market. According to the RHNA, of the total 1,539 lower income households identified as overpayers in Cypress, 1,125 were renter households and only 414 were owner households. This discrepancy is largely reflective of the tendency of renter households to have lower incomes than owner households.

2.1.4 Special Needs Groups

Certain segments of the population may have a more difficult time finding decent, affordable housing due to special circumstances. In Cypress, these "special needs" households include the elderly, handicapped persons, large families, female-headed households, and the homeless.

Elderly: The special needs of many elderly households result from their lower, fixed incomes, physical disabilities, and dependance needs. Approximately 11 percent of the City's households in 1980 were headed by an elderly member 65 years of age or older. Applying this proportion to the City's households in 1989 equates to an estimated 1,608 elderly households in Cypress. Within this group, an estimated 60 percent are living in family households, 20% in unrelated households, and 20% are living alone. The proportion of elderly can be expected to increase as those persons between the age of 35 and 64 grow older. Escalating housing costs, particularly in the rental market, severely impact housing affordability for the elderly, who are usually on fixed incomes. Housing needs of the elderly can be addressed through the provision of smaller units, congregate housing, second units on lots with existing homes, shared living arrangements, and housing assistance programs. The Cypress Redevelopment Agency is in the process of soliciting proposals offering a package of development incentives in exchange for the development of 124 senior rental units adjacent the Cypress Senior Center. A minimum of 20 units will be affordable to very low income seniors, and 10 units affordable to low income seniors. The project will be 100% handicapped accessible. In addition, the City recently approved the development of a 110 unit senior retirement community on a site previously occupied by a Volkswagen dealership.

Handicapped: Physical handicaps can hinder access to housing units of traditional design as well as potentially limit the ability to earn adequate income. The 1980 Census contains data on persons who have physical disabilities that are work and/or public transportation related.

According to the Census, there were 1,618 persons in Cypress with a work disability which was defined as a physical condition that impeded a person's ability to work. Another 490 persons had a public transportation disability, defined as a physical condition that presented difficulty in the use of public transportation. In aggregate, an estimated 5.2 percent of the City's residents were physically handicapped in 1980, translating to an estimated 2,367 handicapped residents in 1989.

Housing opportunities for the handicapped can be maximized through housing assistance programs and by providing design features such as widened doorways, ramps, lowered countertops, single-level units, and ground floor units. The Housing Element sets forth policies to implement State standards for the provision of handicapped accessible units in new development and, in addition, to encourage housing which is provided for the handicapped to be located in close proximity to public transportation and services. As discussed in the previous section, the Redevelopment Agency is soliciting proposals for the development of 124 senior citizen apartment units which meet Title 24 requirements for handicapped accessibility.

Large Families: Large families are identified as a group with special housing needs based on the limited availability of adequately sized, affordable housing units. Large families are often of lower income, frequently resulting in the overcrowding of smaller dwelling units and in turn accelerating unit deterioration. Approximately 13 percent of the City's households in 1989 had five or more members, translating to 2,003 households. This represents a decrease from 1980 when large households comprised 18 percent of the City's total households. This decrease in large family households is indicative of the decline in the number of children under 20 years of age in Cypress (refer to Page 2-3 of the Technical Data Report), and an aging in place of the City's residents.

In order to assess the magnitude of need for subsidized rental housing for large families in Cypress, a survey of the number of bedrooms in units rented by Section 8 certificate holders was conducted. Large families are defined by HUD as families in units with three or more bedrooms. Approximately one-third of the 112 households in Cypress receiving Section 8 rent certificates occupied units with three or more bedrooms, as compared to only twenty percent County-wide. This is likely due to the greater availability of three and four bedroom units in Cypress (refer to Tables 17-21 in the Technical Data Report), combined with the lower incidence of seniors in the City, and thus fewer one and two bedroom units. The City will address the needs of large families by providing funds to augment existing rent subsidies specifically targeted to large families; by encouraging the development of affordable housing with a mix of unit sizes; and through provision of rehabilitation assistance which can be utilized for unit expansion.

Female-Headed Households: Female-headed households tend to have low incomes, thus limiting housing availability for this group. (Cypress' female-headed households earned only 56% of the 1979 average income of all family households in the City). In 1980, 11 percent of Cypress' households were headed by a woman, as reported in the Census. Applying this percentage to the City's 1989 households translates to an estimated 1,632 female-headed households. Additionally, an estimated 70 percent (1,145) of the City's female-headed households have dependent children under 18 years of age. Thus, providing housing opportunities for this group relates both to affordability and services related to the care of children. While there is no definitive data regarding the housing tenure of this group, it can be assumed that low incomes preclude the option of homeownership for most female-headed households.

To address the housing affordability needs of female-headed households, the Housing Element provides for expansion of existing affordability programs, such as rent subsidies, and sets forth several new programs, such as non-profit housing development and shared equity/downpayment assistance, to increase the supply of affordable housing in Cypress. Housing opportunities for female-headed households with children are addressed through Housing Element policies which call for continued coordination with the Cypress Elementary School District in the provision of childcare facilities, and consideration of the use of incentives to encourage childcare to be provided coincident with commercial and industrial/Business Park development.

Farmworkers: The special housing needs of many farmworkers stem from their low wages and the insecure nature of their employment. Those persons working in the farming industry have been counted in the City's 1985 Housing Element. At that time, there were 30 farmworker households (.23%) in the low and very low income categories which were eligible for assistance. The demand for housing generated by farmworkers in the City is thus estimated to be nominal.

Homeless: Throughout the country, homelessness has become an increasing problem. Factors contributing to the rise in homeless include the general lack of housing affordable to low and moderate income persons, increases in the number of persons whose incomes fall below the poverty level, reductions in public subsidy to the poor, and the de-institutionalization of the mentally ill. Based on estimates by the Orange County Homeless Issues Task Force, the County's homeless population consists of approximately 8,000 to 10,000 individuals.

According to the Cypress Police Department, an estimated 10 to 35 homeless individuals reside in Cypress, with the greatest numbers "visible" in inclement weather as they seek shelter. Most of these individuals are single males; few families are represented.

Homeless in Cypress congregate in the following locations: 1) the shopping center complex at Valley View Avenue and Ball Road, 2) along Lincoln Avenue, 3) Cypress Park, and 4) the lobby of the Police Department. There is no adopted policy through which transportation aid is given to the homeless; however, adults who are mentally ill and those with a critical need are taken to shelters by the Cypress Police Department. The Cypress Police Department provides assistance on a rotational basis in managing cold weather shelters in the County. Additionally, homeless juveniles are frequently provided transportation to the Orangewood Childrens Home, a County maintained facility, located in the City of Orange.

The Housing Element calls for the City to coordinate with local social service providers to address the needs of the area's homeless population. The Element also calls for identification of appropriate zones for the location of transitional housing and emergency shelters for the homeless.

2.2 Housing Constraints

Actual or potential constraints on the provision and cost of housing affect the development of new housing and the maintenance of existing units for all income levels. Market and governmental constraints to housing development in Cypress are discussed below.

2.2.1 Market Constraints

The high cost of renting or buying adequate housing is the primary ongoing constraint to providing adequate housing in the City of Cypress. High construction costs, labor costs, land costs and market financing constraints are all contributing to decreases in the availability of affordable housing.

Construction Costs: The single largest cost associated with building a new house is the cost of building materials, comprising between 40 to 50 percent of the sales price of a home. Overall construction costs rose over 30% between 1980 and 1988, with the rising costs of energy a significant contributor. Construction costs for wood frame, single-family construction of average to good quality range from \$40 to \$55 per square foot, custom homes and units with extra amenities running somewhat higher. Costs for wood frame, multi-family construction average around \$42 per square foot, exclusive of parking.

A reduction in amenities and quality of building materials (above a minimum acceptability for health, safety, and adequate performance) could result in lower sales prices. Additionally, pre-fabricated, factory built housing may provide for lower priced housing by reducing construction and labor costs. An additional factor related to construction costs is the number of units built at the same time. As the number of units developed increases, construction costs over the entire development are generally reduced based on economies of scale. This reduction in costs is of particular benefit when density bonuses are utilized for the provision of affordable housing.

Land: Land costs include the cost of raw land, site improvements, and all costs associated with obtaining government approvals. The limited supply of developable vacant land in Cypress has accounted for a steady increase in raw land costs. Residential land in Cypress costs an average of \$6 to \$8 per square foot on parcels with single-family zoning and \$10 to \$12 per square foot on parcels zoned for multi-family development. It is estimated that these costs contribute 20 to 25 percent to the final sales price of a new home. Left alone, the rapidly escalating market price of land will tend to encourage mainly higher priced development. Higher density zoning could reduce the cost per unit of land, but land zoned for higher densities commands a higher market price. For this reason, density bonuses rather than zoning changes may be the preferred vehicle for reducing land costs.

Labor Costs: Labor is the third most expensive component in building a house, constituting an estimated 17% of the cost of building a single-family dwelling. The cost of union labor in the construction trades has increased steadily since April 1974. The cost of non-union labor, however, has not experienced such significant increases. Because of increased construction activity, the demand for skilled labor has increased so drastically that an increasing number of non-union employees are being hired in addition to unionized employees, thereby lessening labor costs.

Financing: While interest rates have fallen more than 10 percent from their near 20 percent high in the early 1980s, they still have a substantial impact on housing costs which is felt by renters, purchasers and developers. It should be noted that most conventional financing is now variable rate. The ability of lending institutions to raise rates to adjust for inflation will cause many existing households to overextend themselves financially, as well as returning to a situation where high financing costs substantially constrain the housing market. An additional obstacle for the first-time home buyer is the downpayment required by lending institutions of between 10-20%.

The median sales price of a single-family home in Cypress (1989) was \$209,500. A \$188,550 mortgage amortized over 30 years at an interest rate of 10.5% would result in monthly house payments of \$1,724. This level of payment eliminates Cypress' very low, low and moderate income households from the for-sale housing market.

Interest rates are determined by national policies and economic conditions, and there is little that local governments can do to affect these rates. Jurisdictions can, however, offer interest rate write-downs to extend home purchase opportunities to lower income households. In addition, government insured loan programs may be available to reduce mortgage downpayment requirements.

Contact was made with the City's major lending institution, Security Pacific Bank, to evaluate whether there are any underserved income groups in the community for new construction or rehabilitation loans. Under the Home Mortgage Disclosure Act (HMDA), lending institutions are required to disclose the number, amount, and location (by census tract) of mortgage and rehabilitation loans originated or purchased. Annual HMDA Reports for Security Pacific Bank were reviewed to evaluate whether residential financing is generally available in Cypress' lower income census tracts, consisting of tracts 1101.04, 1101.09, and 1101.11. HMDA Reports for the years 1987-1989 indicated single and multi-family mortgage loans had been issued in each of these census tracts, with a total of 28 loans originated during the three year period. While no home improvement loans were issued by Security Pacific in these census tracts during 1987-1989, this is likely due to the tax benefits of using a home equity loan for rehabilitation purposes rather than a home improvement loan; home equity loans are not currently tracked by the HMDA reports. Based on evidence of rehabilitation activity in these lower income census tracts, financing appears to be readily available.

Profit, Marketing and Overhead: Developer profits generally comprise 10-15% of the selling price of single-family homes and slightly lower for condominiums. However, in communities like Cypress where the market demand for housing is high in comparison to the available housing supply, developers are able to command higher prices and realize greater margins of profit.

Rising marketing and overhead costs have contributed to the rising costs of housing. Inflation has spurred much of the increase in marketing and overhead. Intense competition among developers has necessitated more advertising, more glamorous model homes and more expensive marketing strategies to attract buyers.

2.2.2 Governmental Constraints

Housing affordability is affected by factors in both the private and public sectors. Actions by the City can have an impact on the price and availability of housing in the City. Land use controls, site improvement requirements, building codes, fees and other local programs intended to improve the overall quality of housing may serve as a constraint to housing development.

Land Use Controls: The Land Use Element of the General Plan and corresponding zoning provide for a full range of residential types and densities dispersed throughout the City. Densities range from 0-5 units per acre in areas designated for Low Density Residential to 20 units per acre in areas designated for High Density Residential. Nearly three-quarters of the City's land area is planned for low density residential use, evidenced by the predominance of detached single-family homes in Cypress. Considerably less acreage is planned for medium and high density uses, which characteristically provide condominium and apartment units. In addition to these three residential land use categories, Cypress has designated a special land use category for mobile home parks. Areas of the City designated for Mixed Development and Planned Community allow for a mixture of residential uses, densities, and housing types.

The City of Cypress is currently undertaking a General Plan Update. As part of this planning process, existing and planned land uses in the City will be evaluated, potentially resulting in revisions to the Land Use Plan. Any such revisions will ultimately be reflected in the Housing Element.

As an established City, much of the land currently designated for residential development in Cypress is already built out. However, as indicated in the following section on Housing Opportunities, additional residential development in the City will be accommodated through several means, including development on vacant, underutilized, surplus and non-residential land. Considering the potential residential development from all these sources, a total of 925 additional dwelling units could be accommodated in Cypress under the current General Plan during the five-year time frame of the Housing Element (refer to Table 2

in Section 2.3.5). SCAG has estimated a future housing need of 792 new units in the City through the year 1994. The Plan thus provides a residential development capacity which is more than adequate to serve projected future housing demand. The Land Use Plan cannot therefore be interpreted as a constraint to the provision of affordable housing, particularly since 346 units are designated for high density family and senior citizen housing and can be more readily priced to meet the needs of lower income households.

Fees and Improvements: Various fees and assessments are charged by the City to cover the costs of processing permits and providing services and facilities, such as utilities, schools and infrastructure. Almost all of these fees are assessed through a pro rata share system, based on the magnitude of the project's impact or on the extent of the benefit which will be derived. However, these fees contribute to the cost of housing and may constrain the development of lower priced units. The City has in the past waived or subsidized certain fees for the provision of lower income and senior citizen housing. A fee reimbursement program for affordable housing could be financed by the City's redevelopment set-aside fund. The Housing Element calls for the City to monitor all regulations, ordinances, departmental processing procedures, and residential fees to assess their impact on housing costs.

Building Codes and Enforcement: The City of Cypress has adopted the State Uniform Building, Plumbing, Mechanical and Fire Codes. These codes are considered to be the minimum necessary to protect the public health, safety and welfare. The local enforcement of these codes does not add significantly to the cost of housing. Different standards are required for single-family and multi-family development. Parking requirements for single-family uses are two (2) garage spaces per unit while multi-family uses must provide covered spaces for apartments and garages for condominiums. Multi-family provisions for covered spaces or garages depends upon the number of bedrooms in the unit: one (1) space for a bachelor, 1-1/2 spaces for a one bedroom, two (2) spaces for two bedrooms, and 2-1/2 spaces for three bedrooms. Guest parking is required at a rate of .5 uncovered spaces per unit for building sites containing two or more dwelling units. Additionally, all residential zones are required to landscape front and street side yards consisting predominately of plant materials except for allowable walks, drives, and fences. The City has recently adopted a fire sprinkler ordinance to require the installation of sprinkler systems in all single-family and multi-family development. Sprinklers add approximately \$1.00 to \$1.50 per square foot in construction costs with simple construction and multi-family units at the low end of the cost range and single-family custom homes at the upper end.

Lot coverage requirements in single-family and RM15 zones are a maximum of 40% of the site, with up to 45% building coverage permitted in RM20 zones. The City does not have any type of growth control measures in place to limit residential development in its jurisdiction.

Local Processing and Permit Procedures: The evaluation and review process required by City procedures contributes to the cost of housing in that holding costs incurred by developers are ultimately manifested in the unit's selling price. Residential projects in Cypress generally receive concurrent processing and are governed by one level of decision-making body, the City Council.

One potential way to reduce housing costs is to reduce the time for processing permits for affordable housing projects. As review times are already streamlined in the City, cost savings from "fast track" processing would be minimal. Nonetheless, as land holding costs can run over \$1,000 per unit for a 9 to 12 month period, the Housing Element sets forth a policy to provide for priority development review processing for low and moderate income housing applications.

2.3 Housing Opportunities

This section evaluates the potential additional residential development which could occur in Cypress under the City's adopted General Plan and zoning.

2.3.1 Vacant Sites

Until recently, vacant land for residential development was virtually non-existent in Cypress. However, clean-up of a 144 acre site previously occupied by the Texaco Tank Storage Farm provides a significant residential development opportunity for the City. A specific plan has been developed for the tank farm property and the property has been zoned Planned Community Residential, providing for 671 single-family dwelling units. The Schedule of Absorption adopted as part of the Development Agreement for this project indicates the following project phasing: March 1991 - 26 units developed; March 1992 - 150 units developed; March 1993 - 150 units developed; March 1994 - 150 units developed; March 1995 - 105 units developed; March 1996 - 75 units developed; and March 1997 - 15 units developed. Within the five year period of this Housing Element (through July 1994), 476 of the total 671 dwelling units on the tank farm property will be completed.

A land use survey was conducted by City staff to identify additional residential development opportunities in Cypress. A total of five vacant residential parcels were identified, all less than one-quarter acre in size. While the majority of these parcels are planned for high density development, their limited acreage can accommodate the development of only 17 dwelling units. As illustrated in Table 1, virtually all residential development on vacant lands will occur on the tank farm property.

TABLE 1
CITY OF CYPRESS
VACANT LANDS SUITABLE FOR RESIDENTIAL DEVELOPMENT

Land Use Category(a)	Vacant Acreage	Potential Dwelling Units
Low Density Residential (5 du/gross acre)	0.00	0
Medium Density Residential (15 du/gross acre)	.15	2
High Density Residential (20 du/gross acre)	.81	15
Planned Community Residential Development (average 5 du/gross acre)	144.00	671
TOTAL	144.96	688

Source: City of Cypress Planning Department;
Cotton/Beland/Associates, Inc.

- (a) The upper end of the density range for each residential land use category is permitted by right under the City's General Plan and Zoning. Density bonus incentives often result in the development of residential projects with densities up to 25% greater than the upper end of the density range.

2.3.2 Underdeveloped Sites

In addition to development on vacant lands, there is the potential for new residential development on sites which are currently developed at densities lower than those permitted under the General Plan and zoning. Particularly in the northern portions of the City which were developed at lower densities under the jurisdiction of the County, the trend has been toward the intensification of existing residential parcels to higher densities. Figure 1 maps the general locations where residential intensification has occurred and can be expected to continue in the future.

As part of the City's land use survey, a parcel-specific analysis was conducted to quantify the increase in residential dwelling units which could be accommodated in the City's underutilized residential areas. This analysis indicated a net increase of 403 dwelling units could be developed - 5 Low Density, 199 Medium Density and 199 High Density units. Properties which had pulled building permits for remodeling were excluded from these calculations due to the improbability of their recycling in the near future.

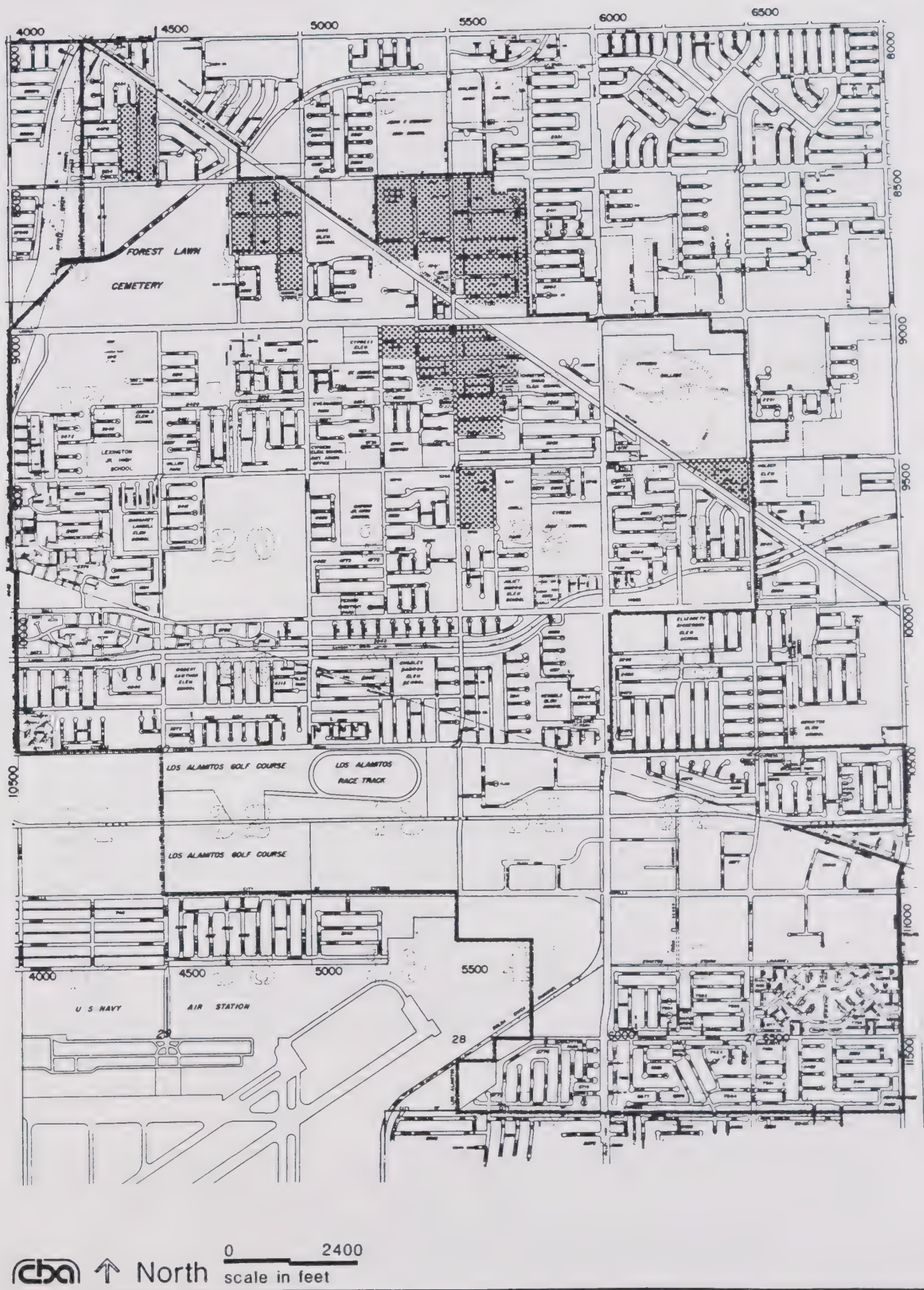


Figure 1
City of Cypress
Underutilized Residential Neighborhoods

In order to estimate the net increase in residential development attributed to recycling over the five year period of the Housing Element, recycling activity during the past 4 1/2 years (1986-April 1990) can be applied to the 1989-1994 period of the Housing Element. Replacement can conservatively be estimated at a ratio of four-to-one, although it is likely many single units will be replaced with a greater number of units. During the 1986- April 1990 period, 240 dwelling units were developed through residential recycling in the City's underdeveloped neighborhoods, resulting in an approximate net increase of 180 dwelling units in Cypress. Extrapolating this same rate of residential recycling to the five year period of the Housing Element translates to an estimated net increase of 198 dwelling units which can reasonably be expected to develop during the 1/89 - 6/94 period.

The City of Cypress is currently undertaking a comprehensive General Plan Update. As part of this planning process, residential land use densities permitted under the General plan will be evaluated, potentially resulting in changes to the residential buildout potential in the City's underutilized residential areas. Any such revisions will be reflected in the Housing Element.

2.3.3 Surplus Sites

Because of declining student enrollment in Cypress, several schools have been closed and are considered surplus land by the School District. While the future use of many of these sites is still uncertain, the six-acre Cypress Elementary School site has been purchased by the Cypress Redevelopment Agency for expansion of the existing Cypress Senior Citizens Multi-Purpose Center located on the site, and for the development of an affordable senior citizen housing project.

The Cypress Elementary School site is located within the Public/Semi-Public General Plan and Zone district, which allows for "affordable elderly residential development" subject to a Conditional Use Permit. Approximately two of the site's total six acres are to be developed with 124 units of senior rental housing, equating to a density of 62 units per acre. The Agency intends to write down the cost of the land approximately \$5/square foot in exchange for deed restrictions on the rent and occupancy of 20 units for Very Low income households and an additional 10 units for Low Income households. This will result in a total land write-down subsidy of approximately \$425,000, which will be funded through the City's redevelopment set-aside fund.

2.3.4 Non-Residential Sites

In addition to Public/Semi-Public zones, the City's Commercial Heavy (CH) zone district also allows for the development of senior citizen housing subject to a Conditional Use Permit. Lincoln Avenue, Cypress' major east/west arterial, is zoned CH throughout most of its length, thereby providing opportunities for senior housing infill.

The Cypress City Council recently approved a 110-unit senior citizen retirement community on Lincoln Avenue on a site previously utilized as a Volkswagen dealership. The project site is located in close proximity to the Cypress Senior Citizens Multi-Purpose Center, as well as health care, public transportation and shopping. The overall density of the 110 senior rental units is 55 units/acre.

In an attempt to accommodate existing irregular parcel sizes and differing development standards along Lincoln Avenue, the City has adopted a special overlay - Lincoln Avenue Combining Zone - along much of the street. This overlay permits any urban use, including high density residential at 20 units/acre, subject to a Conditional Use Permit. The City is currently reviewing two proposals for condominium projects within the Lincoln Avenue Combining Zone. Staff is recommending approval on a 43 unit condominium project, including 9 low income density bonus units, on a 1.7 acre site located at 6242/6252 Lincoln Avenue. A second project, located at 6292-6302 Lincoln Avenue, consists of 41 condominiums on a 1.7 acre site and is pending approval based on design revisions.

2.3.5 Availability of Public Services and Facilities

As a highly urbanized community, public facilities are available to facilitate development throughout Cypress. All of the land designated for residential use in the Low Density, Medium Density, and High Density categories is presently served by sewer lines, water lines, streets, storm drains, telephone, electrical and gas lines.

2.3.6 Residential Development Potential Compared with Cypress' Housing Needs

The Regional Housing Needs Assessment (RHNA) prepared by SCAG has identified a future housing need for Cypress of 792 units to be developed over the next five years (1989-1994). Combining the residential development potential on vacant, underutilized, surplus and non-residential lands, an estimated 925 additional units could be developed in the City during the five-year time frame of the Housing Element (refer to Table 2). This would indicate that the City's General Plan and zoning provide for a residential development capacity which is adequate to accommodate the City's share of regional housing needs.

**TABLE 2
CITY OF CYPRESS
1989-1994 POTENTIAL RESIDENTIAL DEVELOPMENT SUMMARY**

Land Use Category	RESIDENTIAL DWELLING UNIT POTENTIAL				TOTALS
	Vacant Land	Underutilized Land	Surplus Land	Non-Residential Land	
Residential Low Density		4			4
Residential Medium Density	2	97			99
Residential High Density	15	97	124	110	346
Planned Community	<u>476</u> (a)	—	—	—	<u>476</u>
TOTALS	493	198 (b)	124	110	925

Source: City of Cypress Planning Department; Cotton/Beland/Associates.

- (a) Within the five year period of the Housing Element, 476 of the total 671 units planned for the tank farm property will be completed
- (b) While a total of 403 dwellings can be accommodated on under-utilized land, an estimated net increase of 198 units are expected to be developed within the five-year period of the Housing Element based on past development trends.

In terms of development opportunities for lower income households, nearly 40 percent (346 dwelling units) of potential residential growth has been allocated to high density family and senior citizen housing which can more readily be priced to meet the needs of the 231 future Very Low and Low Income households identified by SCAG as Cypress' future housing need. In addition, the City will offer programs including land write-down and density bonus to provide incentives for the development of affordable units.

3.0 HOUSING ELEMENT GOALS AND POLICIES

This section of the Housing Element contains the goals and policies the City intends to implement that address a number of important housing-related issues. Four major issue areas are addressed by the goals and policies of the Housing Element: (1) ensure that a broad range of housing types are provided to meet the needs of both existing and future residents; (2) increase the supply of sound, affordable housing through the rehabilitation of substandard housing units; (3) maintain the supply of sound, affordable housing through the conservation of existing sound housing stock; and (4) promote equal opportunity of housing choice for all residents. Each issue area and the supporting goals and policies are identified and discussed in the following section.

The following goals and policies reflect a revision to those previously adopted to incorporate what has been learned from the prior element and to adequately address the City's housing needs. These goals and policies will serve as a guide to City officials in daily decision-making.

3.1 Housing Opportunities

The City encourages the construction of new housing units that offer a wide range of housing types to ensure that an adequate supply is available to meet existing and future needs. The maintenance of a balanced inventory of housing in terms of unit type (e.g. single-family, multiple-family, etc.), cost, and style will ensure that the existing variety is maintained. Areas of the City have a distinct character due in large part to the density and housing type of their existing residential neighborhoods. New housing constructed in the City should be compatible with the character of the surrounding neighborhood in particular and the City in general.

GOAL 1: Encourage the provision of a wide range of housing by location, type of unit, and price to meet the existing and future needs of Cypress residents.

Policy 1.1 Provide a variety of residential development opportunities in the City, ranging in density from low density single-family homes to high density apartment and condominium developments, as designated on the Land Use Policy Map.

Policy 1.2 Encourage both the private and public sectors to produce or assist in the production of housing, with particular emphasis on housing affordable to lower income households, as well as the needs of the handicapped, the elderly, large families, and female-headed households. Utilize redevelopment set-aside funds to facilitate the development of affordable units, and to provide rent subsidies to large families.

- Policy 1.3 Respond to State-mandated requirements for the development of low and moderate income housing by allowing developers a 25 percent density and at least one additional housing incentive for providing at least 20 percent of the units in a project for lower income residents.
- Policy 1.4 Require that housing constructed expressly for low and moderate income households not be concentrated in any single area of Cypress.
- Policy 1.5 Encourage and activate the development of housing for the elderly through use of incentives such as density bonus, project-based rental assistance, provision of infrastructure, land or interest rate write-downs and fee waivers.
- Policy 1.6 Take advantage of existing infrastructure and public improvements to provide additional affordable housing by allowing second units in single-family zoning districts.
- Policy 1.7 Continue to support the shared housing program sponsored by Senior Meals and Services, Inc. as an option for seniors to share existing housing in the community.
- Policy 1.8 Implement state and federal laws for access and adaptability for the physically handicapped, and continually adopt updates to City codes to reflect current accessibility requirements.
- Policy 1.9 Encourage development of new housing units designated for the elderly and disabled persons to be in close proximity to public transportation and community services.
- Policy 1.10 Continue to work with the Cypress Elementary School District to facilitate the development of child care facilities, and consider the use of incentives to encourage child care to be provided coincident with commercial and industrial/Business Park development.
- Policy 1.11 Coordinate with local social service providers to address the needs of the City's homeless population. Amend the Zoning Ordinance to permit the development of transitional housing in the City's multi-family residential zones in locations close to services, subject to Conditional Use Permit. Amend the Zoning Ordinance to permit emergency shelters in commercial and industrial zones, subject to a CUP.

- Policy 1.12 Monitor all regulations, ordinances, departmental processing procedures, and residential fees related to rehabilitation and/or construction to assess their impact on housing costs, and revise as appropriate.
- Policy 1.13 Provide priority development review processing for low and moderate income housing applications.
- Policy 1.14 Encourage the use of favorable home purchasing techniques for first time homebuyers and for moderate income households, such as municipal mortgage loans, shared equity and limited equity cooperatives, as might become available through public and private agencies and institutions.
- Policy 1.15 Encourage the use of energy conservation devices such as low flush toilets and weatherization improvements, along with passive design concepts which make use of the natural climate, to increase energy efficiency and reduce housing costs.
- Policy 1.16 Encourage residential developers to use elements of land use and structure design which add to the safety and security of residential environments.

3.2 Accessibility of Housing

Housing opportunities in the City must be made available to all persons regardless of age, income, or race. The diverse make-up of the region will continue to attract a wide variety of people. The City has made a strong and firm commitment that fair housing practices will continue in Cypress.

GOAL 2: Promote equal opportunity for all residents to reside in the housing of their choice.

- Policy 2.1 Prohibit discrimination in the sale or rental of housing with regard to race, ethnic background, religion, handicap, income, sex, age and household composition.
- Policy 2.2 Continue active support and participation with the Orange County Fair Housing Council to further spatial deconcentration and fair housing opportunities.

3.3 Maintenance and Preservation of Housing

The State of California has made housing preservation and conservation a high Statewide priority. While most of the City's housing stock is less than twenty years old and in good condition, several neighborhoods contain concentrations of housing deterioration. Through its CDBG programs, the City offers low interest rehabilitation loans in its rehabilitation target areas as an incentive for unit upgrading.

GOAL 3: Increase the supply of sound housing at prices affordable by all segments of the community through the rehabilitation of substandard housing units.

Policy 3.1 Advocate the rehabilitation of substandard residential properties by homeowners and landlords.

Policy 3.2 Continue existing residential rehabilitation programs which provide financial and technical assistance to lower income property owners to enable correction of housing deficiencies which could not otherwise be undertaken, and evaluate expansion of these programs through use of the Redevelopment Set-Aside Fund in the future.

Policy 3.3 Focus rehabilitation assistance in the City's Rehabilitation Target Areas in order to create substantive neighborhood improvement and stimulate additional unassisted improvement efforts.

Policy 3.4 Continue to utilize the City's code enforcement program to bring substandard units into compliance with City codes and to improve overall housing quality and conditions in Cypress.

Policy 3.5 Mitigate the displacement impacts occurring as a result of residential demolition through unit replacement or relocation of tenants.

GOAL 4: Maintain the supply of sound, affordable housing in Cypress through the conservation of the currently sound housing stock.

Policy 4.1 Encourage the retention of existing single-family residential neighborhoods which are economically and physically sound.

Policy 4.2 Encourage the retention of existing, viable mobile home parks which are economically and physically sound.

Policy 4.3 Promote increased awareness among property owners and residents of the importance of property maintenance to long-term housing quality.

Policy 4.4 Encourage vigorous enforcement of existing building, safety, and housing codes to promote property maintenance.

3.4 Compatibility of Residential Development

Considering the lack of large tracts of vacant land in Cypress, the City will need to rely on infill housing opportunities to meet its housing needs. New housing should be located to most adequately meet the economic, social and transportation needs of residents. The City will encourage the location of housing in areas which best utilize existing community facilities and infrastructure, and which is compatible with the surrounding neighborhood.

GOAL 5: Ensure that new housing is sensitive to environmental and social needs.

Policy 5.1 Encourage residential construction in areas which can be adequately served by public services and facilities in accordance with local plans and programs.

Policy 5.2 Ensure compatibility of new residential development with existing development to enhance the City's residential neighborhoods.

Policy 5.3 Continue to coordinate land use and regulations pertaining to residential zoning development into a long term plan.

Policy 5.4 Develop and apply density and locational standards to ensure site suitability.

4.0 IMPLEMENTATION/HOUSING PROGRAM

4.1 Introduction and Background

The Housing Element describes the housing needs of the City's current and projected population, as well as the specific needs resulting from the deterioration of older units, lack of affordable housing for lower income groups, and special needs for certain segments of the City's population. The goals and policies contained in the Housing Element address the City's identified housing needs. These goals and policies are implemented through a series of housing programs that are funded and administered through a variety of local, regional, State and Federal agencies.

Pursuant to State law, actions included in these housing programs must address five specific areas, as enumerated below:

- Conserving and improving the condition of the existing stock of affordable housing.
- Providing adequate sites to achieve a variety and diversity of housing.
- Assisting in the development of affordable housing.
- Removing governmental constraints if necessary.
- Promoting equal housing opportunity.

Cypress' housing program for addressing unmet housing needs is described in Section 4.4 of this chapter according to the foregoing categories. The overall program strategy developed incorporates what has been learned from the prior Housing Element (Section 4.2) and embodies a major new source of program funding--Redevelopment Set-Aside (Section 4.3).

4.2 Evaluation of Accomplishments Under 1985 Housing Element

State Housing Element law now requires communities to assess the achievements under adopted housing programs as part of the five year update to their housing elements. These results should be quantified where possible (e.g. rehabilitation results) but may be qualitative where necessary (e.g. mitigation of governmental constraints). These results then needs to be compared with what was projected or planned in the earlier element. Where significant shortfalls exist between what was planned and what was actually achieved, the reasons for such differences must be discussed.

The Cypress 1985 Housing Element contains a series of housing programs which are identified as either "Action" programs, or programs for "Study". These programs are identified in a "Program Summary" table on page 8 of the 1985 Element. The Element does not establish quantified objectives or numerical targets for housing assistance under these programs. As such, the following review of adopted Housing Element programs evaluates progress in program implementation without benefit of comparison to a specific quantified objective.

Action Programs

1. Multi-Family Mortgage Revenue Bonds

In 1985, the County of Orange issued \$15 million in multi-family mortgage revenue bonds (Issue A). Cypress was one of six cities to utilize this bond financing to facilitate affordable rental housing construction. As an additional incentive, the City granted a 25% density bonus for the provision of lower income units. The 32 unit apartment project was developed on Walker Street, and includes eight units affordable to lower income households. Long term affordability is assured through a Disposition and Development Agreement. The City has continued to encourage developers to take advantage of bond financing as a means of providing affordable housing.

2. Section 8 Rental Assistance

The 1985 Housing Element indicates Cypress had 70 Section 8 rent certificates under lease. As of January 1990, a total of 112 Cypress households were receiving rent certificates, with approximately ten additional households receiving rent vouchers. With forty Cypress households added to the Housing Authority's two year waiting list in 1989 alone, it is clear the Federal government can only partially fulfill the City's rental assistance needs. In order to address this unmet need, the Housing Element update recommends a portion of the City's redevelopment set-aside fund be utilized to augment the number of rent subsidies available.

3. Housing Discrimination

As a participant in the Urban County Program of the Federal Community Development Block Grant (CDBG) Program, the County contributes funds to the Orange County Fair Housing Council on behalf of Cypress and other participating cities. The Fair Housing Council provides the following types of services: housing discrimination response, landlord-tenant relations, housing information and counseling, and community education programs. The County's 1989 contribution was for \$75,000.

4. Redevelopment

In 1982, Cypress formed a Redevelopment Project Area consisting of approximately 68 acres of land. This project area is centrally located within the City and includes a seven acre site directly east of the Civic Center, the 22 acre Oxford School site, and the six acre Cypress Elementary School site. Redevelopment monies have been used to assist in the development of a 74 unit affordable senior housing project. The Agency worked with a non-profit sponsor, the National Church Residences of Cypress, to obtain Federal Section 202 funding for project construction, and assisted with land costs, on and off-site improvement costs, and development fees. The Agency also contributed \$75,000 to provide added project amenities including balconies and improved building materials which exceeded HUD standards.

The Cypress Redevelopment Agency has indicated that approximately \$550,000 will be available for expenditure from the Redevelopment Set-Aside Fund during the five year period of this Housing Element, and the City is in the process of developing an overall strategy for expenditure of the fund. Several of the programs set forth in the Element have identified the redevelopment set-aside fund as a potential source of program funding.

5. Density Bonus/Incentive Program

Cypress has incorporated provisions into its Zoning Code to allow density bonuses in return for guarantees of affordable dwelling units in new construction as provided by State law. The City has prepared a list of standards entitled "City of Cypress: Density Bonus Policy" which are provided to prospective developers. In addition to identifying project requirements such as rent and income limits, the Density Bonus Policy also identifies the potential for single and multi-family bond financing through the County, and the possibility of participation on the Section 8 Housing Assistance Program. This outreach has proven an effective tool in encouraging density bonus developments, with nine density bonus projects constructed since 1985, providing 31 units of Very Low, Low and Moderate income housing. The only change recommended to the City's density program in the Housing Element update is to revise the City's Zoning Code and Density Bonus Policy to reflect recent revisions in State density bonus law.

6. Site Acquisition

The 1985 Housing Element indicates that site acquisition funds will provide for the lease and/or purchase of a site for the eventual construction of an 80 unit affordable senior housing project. Since this time, the Redevelopment Agency has acquired the six-acre Cypress Elementary School District site which was sold by the school district as a surplus school site. The Agency provided a land write-down, along with other development incentives, to facilitate the construction of a 74 unit Section 202 senior housing project on the site. The Agency is currently soliciting proposals for the development of 120 to 125 additional senior rental units on the site, for which it will offer a package of development incentives. Finally, CDBG monies are being used to finance expansion of the existing senior citizen center located on the site.

7. Streamline Project Processing and Review

Development proposals in Cypress continue to be governed by a single decision-making body, the City Council, and generally receive concurrent processing. The City has been successful at keeping review times to a minimum, and the City's residential processing times compare favorably with other communities. In order to further reduce land holding costs, this update to the Housing Element recommends the implementation of priority review processing for affordable housing projects.

8. Ongoing Comprehensive General Plan Program

The City undertook a comprehensive update to its General Plan in 1985/1986, providing for consistency between each General Plan element. In 1989, Cypress hired a consultant to evaluate the implications of alternative land use scenarios in six special study areas identified by the City. Based on the resolution of land use issues in these study areas, the City's Land Use and other related General Plan elements will be modified accordingly.

9. Housing Information Data Collection and Dispersal

The City maintains up-to-date housing information available at the public counter to assist renters, homeowners and builders. Information available includes development standards handout, density bonus policy handout, list of major apartment complexes, Community Guide, and referrals to housing agencies. City planning staff have also developed an inventory of vacant and redevelopable residential sites for distribution to interested parties. When the City receives its annual CDBG allocation, the availability of rehabilitation assistance is advertised in the City's quarterly newsletter, and public notices are placed in the local newspaper. This update to the Housing Element recommends the City expand its outreach efforts to include the County's rental rehab program and the senior shared housing program, through such methods as public service announcements on cable television.

10. Systematic Code Enforcement

The City's code enforcement program is based on complaints reported to the City. The majority of code violations in Cypress pertain to zoning, with an average of less than ten dwelling units cited annually for substandard conditions. The only recommended change to the City's existing code enforcement program is for the City to inform property owners in violation of City codes of any rehabilitation loans or grants he/she may be eligible for in correcting code violations. As Cypress' housing stock begins to age, it may be necessary for the City to become more aggressive in their code enforcement efforts.

11. Community Improvement Program

The City implements several programs to facilitate neighborhood preservation and improvement, including home maintenance and repair classes and counseling, a mini-grant program to allow eligible residents to purchase necessary home improvement materials, and publication of the availability of low interest rehabilitation loans. City staff will continue to utilize the Cypress quarterly newsletter to advertise these programs. In addition, the City is considering initiating a City beautification program to promote neighborhood maintenance and improvement.

12. Public Facilities and Improvements

To augment housing rehabilitation efforts in targeted areas, a portion of the City's CDBG allocation is spent on street reconstruction including the installation of curbs, gutters and sidewalks, street lights, handicap ramps, and sewer connections. Street improvements planned in the Watson Street and DeLong Street areas will provide the necessary infrastructure to support multi-family infill permitted under zoning. The County of Orange has initiated infrastructure improvements in the recently annexed Grace Avenue and Belmont Street area. Improvements include the installation of storm drains, curbs and gutters, and street repairs.

13. Replacement Housing

According to the City's building department and code enforcement officers, the City has not had to initiate removal of any substandard and/or deteriorated housing units since adoption of its 1985 Housing Element. Two substandard, abandoned single-family homes, and a substandard garage have been demolished by property owners. Redevelopment activity in the Wicker Drive Area will result in the removal of 21 low and moderate income dwelling units, and pursuant to Redevelopment Law, replacement housing will be provided.

14. Housing Rehabilitation Assistance

As a participating jurisdiction in the Urban County Program, the County administers CDBG-funded rehabilitation programs in Cypress. Resident interest in rehabilitation assistance has been significant with approximately 140 loans and grants made between 1985 and 1989. The County Block Grant administrator has indicated that Cypress fully expends its CDBG allocation on an annual basis. The Housing Element recommends that Redevelopment Set-Aside monies be used to augment CDBG rehab funds, and expanded advertisement of the County rental rehab program be pursued.

Study Programs

1. Single-Family Mortgage Revenue Bonds

When the County issues Single Family Mortgage Revenue bonds, the Cypress City Council adopts a resolution with findings of the availability of bond financing. In 1980, Housing Dynamics, Inc. developed four units of single-family bond financed housing in Cypress. Since that time, no additional single-family bond projects have been developed in the City. According to the County, single-family mortgage revenue bonds are more difficult to receive State allocations for than multi-family bonds.

2. Article 34

A referendum under Article 34 would allow the City to finance, insure or own low/moderate income housing units in its jurisdiction. In 1986, a referendum was passed by Cypress voters for construction of a senior housing project. To the extent that the City or other public body, such as the Housing Authority, develops, constructs or acquires greater than 50 percent of a low income housing project in the future, the City would request approval of another Article 34 referendum by the voters.

3. Small Scale Infill Housing

City planning staff have recently initiated a program to maintain an inventory of vacant and redevelopable residential sites in Cypress for use by interested parties in identifying development opportunities. This site inventory is distributed at the public counter.

Housing Production in Comparison with Regional Housing Needs

The Regional Housing Allocation Model (RHAM) adopted by SCAG identified the following new construction need for Cypress during the 1984-1989 period:

<u>Income Level</u>	<u>Number of Units</u>
Very Low	153
Low	188
Moderate	261
Upper	565
TOTAL:	1,167

During the past five years of the City's adopted Housing Element (1984-1989), a total of 231 single family and 227 multi-family units were constructed. Of the 227 multi-family units, 75 units were constructed as affordable senior citizen rental units. The majority of the remaining multi-family units were developed as apartment complexes with rental rates generally affordable to low income households. The remaining multi-family units were developed as condominium projects which provided affordable homeownership opportunities to moderate income households. With only 231 single-family units developed during the 1984-1989 period, the City's greatest housing production shortfall was in providing housing for upper income households. Based on the unavailability of vacant land, the 1985 Cypress Housing Element recognized the City's inability to meet its total regional housing need of 1,167 dwelling units, and identified as its five year goal the achievement of up to 55% of its need, or 641 dwelling units. With 458 units developed during the period, the City was only able to meet 40% of its total dwelling unit need.

Several significant areas of residential development opportunity have opened up in Cypress which will allow the City to meet its future regional housing needs for the 1989-1994 period. Clean-up of a 144 acre site previously occupied by the Texaco Tank Storage Farm will accommodate 671 new single-family dwellings, 476 which will be developed during the five year time frame of the Housing Element. In 1988, the Crescent/Lincoln neighborhood was annexed to the City, providing opportunities for multi-family development through residential infill. The Cypress Redevelopment Agency has purchased the Cypress Elementary School site and intends to assist in the development of 124 units of affordable senior citizen rental housing on the site. A second 110-unit senior citizen rental project has been approved for development on a parcel previously used as a Volkswagen dealership.

4.3 Redevelopment Set-Aside Fund

Legislative Background

State Redevelopment Law provides the mechanism whereby cities and counties within the state can, through adoption of an ordinance, establish a redevelopment agency. The Agency's primary purpose is to provide the legal and financial mechanism necessary to address blighting conditions in the community through the formation of a redevelopment project area(s). Of the various means permitted under State Law for financing redevelopment implementation, the most useful of these provisions is tax increment financing. This technique allows the assessed property valuation within the Redevelopment Project Area to be frozen at its current assessed level when the redevelopment plan is adopted. As the property in the project area is improved or resold, the tax increment revenue generated from valuation increases above the frozen value is redistributed to the redevelopment agency to finance Redevelopment Project costs.

In the 1950s and 1960s, many redevelopment projects focused primarily upon demolition of blighted residential buildings and development of new non-residential uses or upper income residential projects. While these types of projects worked to eliminate blighting conditions, they did little or nothing to aid the mostly low and moderate income residents of the housing that was demolished, in addition to having a negative impact on a community's supply of affordable housing. To address the problems that arose with regard to the effect of redevelopment on low and moderate income housing, the state legislature enacted a series of changes to Community Redevelopment Law which require redevelopment agencies to undertake activities which will assist in the production of low and moderate income housing.

The legislative requirements regarding low and moderate income housing generally fall into three basic categories: 1) expenditure of 20% of the tax increment revenue to increase and improve the supply of low and moderate income housing in a community; 2) requirements that redevelopment agencies replace low and moderate income housing which is destroyed as a result of a redevelopment project; and 3) requirements that a portion of all housing constructed in a redevelopment project area be affordable to low and moderate income persons and families. The requirement for redevelopment agencies to set aside 20% of a project's tax increment for low and moderate income housing can provide a significant source of funding for implementation of a community's housing programs.

Cypress

In 1982, Cypress formed the Civic Center Redevelopment Project Area consisting of approximately 68 acres of land. This project area is centrally located within the City and includes a seven-acre site directly east of the Civic Center, the 22-acre Oxford School site and the six-acre Cypress Elementary School site. The Civic Center Redevelopment Project

Area was subsequently amended in 1988 to encompass the 144-acre Texaco Tank Farm site. In 1990, the Cypress Redevelopment Agency adopted two additional redevelopment projects: the Lincoln Avenue Redevelopment Project and the Los Alamitos Race Track and Golf Course Redevelopment Project.

The City's redevelopment consultants have projected the amount of tax increment anticipated to be generated from the three Cypress redevelopment projects during the 1989-1994 time frame of the Housing Element, and the related contribution of funds to the affordable housing set-aside fund. Based on the recent adoption of the Lincoln Avenue and Los Alamitos Redevelopment Project Areas and the associated lag time to generate tax increment monies, these two projects are anticipated to contribute negligible monies to the redevelopment set-aside fund during the five-year period of this Housing Element cycle. The Civic Center Redevelopment Project will, however, begin generating tax increment in the more immediate future from the 671 unit Cypress Homes development on the tank farm site. Based on the development of 476 of the project's total 671 housing units during the time frame of the element, tax increment monies of \$2.75 million will be generated, providing a \$550,000 contribution to the City's affordable housing set-aside fund.

In 1988, AB 4566 mandated that redevelopment agencies with "excess surplus" ^(a) monies in their housing set aside funds must either spend these funds within five years or else transfer them to another local housing authority for expenditure. State law sets forth a variety of options for localities to expend their housing funds, including the following:

- Land Disposition and Write-Downs
- Site Improvements
- Loans
- Issuance of Bonds
- Land and Building Acquisition by Agencies
- Direct Housing Construction
- Housing Rehabilitation Programs
- Rent Subsidies
- Predevelopment Funds
- Administrative Costs for Non-Profit Housing Corporations

(a) Excess surplus is defined as any unexpended and unencumbered balance in an agency's Low and Moderate Income Housing Fund that exceeds the greater of five hundred thousand dollars or the aggregate amount deposited into the Fund pursuant to Community Redevelopment Law (Health and Safety Code Sections 33334.2 and 33334.6) during the agency's preceding five fiscal years.

During the time period of this Housing Element, the Cypress Redevelopment Agency will expend the estimated \$550,000 to accrue to its set-aside fund on two primary programs: the write-down of land costs for the development of 124 units of affordable senior citizen housing and the augmentation of existing Section 8 rental subsidies offered to large families in its jurisdiction. The land write-down will be in the amount of approximately \$5 per square foot, resulting in a total subsidy of \$425,000.

The remaining \$125,000 in set-aside funds will be utilized to increase the number of rental subsidies currently offered through the Orange County Housing Authority. The subsidy amount represents the difference between fair market rents and 30 percent of household income which, assuming a market rent of \$1,000 for a three bedroom unit (refer to Table 21 in the Technical Data Report) and a monthly income of \$2,210 for a five person Very Low income household (1990 HUD Guidelines for Orange County), would represent a monthly subsidy of \$335. At this level of rent subsidy, the City will be able to assist approximately eight Very Low income family households using redevelopment set-aside funds through the period of this Housing Element.

During the next Housing Element cycle (1994-1999), the three redevelopment project areas in Cypress will begin generating a more substantial tax increment, and will represent a significant resource for affordable housing programs. These monies will be utilized to continue and potentially expand the rent subsidy program. In addition, the Housing Element identifies the redevelopment set-aside fund as a potential future funding source for the following programs as outlined in Table 3: housing rehabilitation assistance, conservation of existing subsidized housing, development incentives combined with density bonus, land assemblage, and shared equity arrangements.

4.4 Housing Programs

Cypress' overall housing program strategy for addressing its unmet housing needs has been defined according to the following issue areas:

- Conserving and improving the condition of the existing stock of affordable housing.
- Providing adequate sites to achieve a variety and diversity of housing.
- Assisting in the development of affordable housing.
- Removing governmental constraints if necessary.
- Promoting equal housing opportunity.

Housing programs include: programs which were set forth in the previous 1985 Housing Element; programs which the City has undertaken since adoption of the prior Housing Element; and new programs which have been added to address an unmet housing need. This section provides a description of each housing program and future program goals. The Housing Program Summary at the end of this section (Table 3) summarizes the future 5-year goals of each program, along with identifying the program funding source, responsible agency, and time frame for implementation. With an estimated \$550,000 available for expenditure during the five year period of the Housing Element, redevelopment set-aside funds will be targeted towards two primary programs: land write-down for a senior housing project and rent subsidies for large families. Redevelopment monies have also been identified as a future funding source for additional programs once the City's redevelopment projects begin generating more substantial tax increment.

4.4.1 Conserving and Improving Existing Affordable Housing

The State of California has made housing preservation and conservation a high statewide priority. While most of Cypress' housing stock is in good condition, a large proportion of the City's housing is nearing 30 years of age, indicating the need for continued maintenance to prevent widespread housing deterioration. A windshield survey of housing conditions in the City, conducted in October 1989, identified some concentrated areas of housing deterioration in the City's annexation areas (refer to Figure 2 in the Technical Data Report). These areas are encompassed within the City's four housing rehabilitation areas which have been targeted for CDBG rehabilitation funds.

Community Development Block Grant

Cypress participates in the Urban County Program of the Federal Community Development Block Grant (CDBG) Program. Funds have been used for a variety of projects benefiting low and moderate income households. In

addition, Cypress has taken advantage of other housing funding programs as they have become available and combined these with their CDBG funding allocation to make a project work. Block grant monies have been utilized in Cypress on the following types of housing programs:

- a. CDBG Rehabilitation Loans: Cypress is a cooperating City in the rehabilitation loan program administered through the Orange County Department of Housing and Community Development. This program provides three, six and nine percent interest rate housing rehabilitation loans, depending on tenant owner income, of up to \$15,000 per unit to lower income homeowners and apartment owners throughout the County. All health and safety problems must be corrected before any other home improvements can be made.

According to the Orange County Department of Housing and Community Development, Cypress has been effective in marketing its CDBG loan programs, and has consistently expended its annual funding allotment. In 1989 alone, nine low interest loans were initiated in the City. Based on a continued level of loan activity, the objective of this program will be to rehabilitate 45 units over the next five years. Augmenting the Rehabilitation Loan program with redevelopment set-aside finds in the future will enable a greater number of households to receive assistance.

- b. Rehabilitation Grants: In order to provide a full range of financing mechanisms for the County's Home Improvement Program, a grant program has been established. This program provides a grant of up to \$8,000 for single-family homes and \$5,000 for mobilehomes, with a 20 percent supplement for materials and labor to low/moderate income owner-occupants. The goal of the program is to rectify emergency health or safety hazards in the applicant's home and to provide energy conservation. Approximately 25 grants have been provided in Cypress over the past five years. The future five year goal will be for an additional 25 rehabilitation grants.
- c. Deferred Loans: Some lower income households in need of housing rehabilitation assistance may not qualify for a CDBG rehabilitation loan, and if they aren't elderly or disabled, also don't meet the criteria for a CDBG repair grant. The County thus offers deferred loans on a case by case basis to households which don't qualify for other rehab programs. As available CDBG funding is limited, assistance is generally limited to that necessary to correct health and safety deficiencies.
- d. Rebate Program: The County also provides limited funding to provide rebates for previously approved home repairs which are prepaid by the owner and verified by the County. The rebates are made available for a minimum of \$500 and a maximum of \$3,000 for eligible home repairs completed in selected target areas. Property owners are required to obtain written preapproval for all work subject to rebate.

Property owners are required to select their own licensed contractor and to provide itemized, paid invoices covering all work. In the case of an approved owner builder, only materials shall be subject to rebate. Labor costs for owners and family members are not subject to rebate. Approximately five rebates were granted in Cypress between 1985-1989. Assuming a similar level of activity, the future five year goal will be for five units.

Rental Rehabilitation Program

In addition to the CDBG Rehabilitation Loan Program, the County also operates a separately funded Rental Rehabilitation Program to encourage rehabilitation of substandard apartment buildings in targeted neighborhoods. Through the Rental Rehab Program, the County offers up to a 50% deferred loan to pay towards the total cost of a rehabilitation project, with the balance financed through a 6% interest rate loan. The maximum loan amount per project is the sum of: (1) \$5,000 per unit for units with no bedrooms, (2) \$6,500 per unit for units with one bedroom, (3) \$7,500 per unit for units with two bedrooms, and (4) \$8,500 per unit for units with three or more bedrooms. To qualify for a Rental Rehab subsidy, more than 70% of the building's tenants must be of low or moderate income.

Participation in the rental rehabilitation loan program has been minimal Countywide, although participation in Cypress has increased over the last year. County staff indicate the requirement for 50 percent matching funds may discourage property owners from taking advantage of this program. This program represents an underutilized funding source which could provide needed rehabilitation assistance for Cypress' target neighborhoods. The City should work with the County to publicize its availability, with the objective of achieving the rehabilitation of ten units annually.

Home Weatherization Improvements

As residential energy costs continue to rise, increasing utility costs reduce the affordability of housing, thus aggravating the City's current shortage of affordable units. Southern California Edison offers a variety of energy conservation services designed to help low-income, senior citizens, permanently handicapped, and non-English speaking customers control their energy use. Homeowners or renters may qualify for the following types of weatherization improvements free of charge: attic insulation, weather stripping, caulking, water heater insulation blankets, water-saving showerheads, heating/cooling duct insulation, and other types of limited home repairs which increase energy efficiency. These programs are described in more detail in Section 7.2 of the Housing Element Technical Data Report. In order to expand utilization of these programs, the City should provide informational brochures at the public counter and at the Community Center.

Code Enforcement

The objective of the City's Code Enforcement Program is to bring substandard housing units into compliance with City codes. Potential code violations are identified based on complaints reported to the City. Cypress' building inspectors work closely with the City property maintenance officer to identify units in need of housing assistance. The majority of code violations in Cypress pertain to zoning, with less than ten dwelling units cited annually for substandard conditions. The City does receive calls related to illegal garage conversions, though it has been difficult for the City to attain sufficient evidence to regulate such conversions.

The only recommended change to this existing program is for the City to inform property owners in violation of City codes of any rehabilitation loans or grants he/she may be eligible for in correcting code violations. As Cypress' housing stock begins to age, it may be necessary for the City to become more aggressive in its code enforcement efforts.

Conservation of Existing and Future Affordable Units

A community's affordable housing stock is a valuable resource which should be conserved, and if necessary, improved to meet habitability standards. The only existing federally assisted housing project in Cypress is a Section 202, 74 unit senior housing project developed in 1988. This project is owned by a non-profit sponsor, and will therefore likely be conserved at affordable rents beyond the 40 year loan period. In addition, the City's Redevelopment Agency entered into a Development Agreement with the project's sponsor which stipulates that the Agency shall have an option and prior right to purchase the project and the site at its then fair market value. The Agency will enter into a similar agreement with the developer of the 124 unit senior housing project in which the Agency will have participation.

The City requires developers which are granted a density bonus to enter into a Density Bonus Agreement to ensure the long term affordability of the lower income units. Recent changes in State Law mandates density bonus units be maintained at affordable rents for a minimum thirty year period, which will be a requirement of any new density bonus projects approved in the City.

The only subsidized affordable housing in Cypress which could potentially expire within the next ten years are the eight units of low income rental housing provided as part of a 32 unit multi-family bond financed project on Walker Street in 1985. In order to address this potential loss in the City's affordable housing stock, the City will consider allocation of future redevelopment set-aside funds and other available funding sources to enable continued subsidy to these units. Local non-profit corporations will be contacted to solicit their interest in potentially taking ownership of this project.

The City will inventory and gather information to establish an early warning system for publicly-assisted housing projects which have the potential to convert to market rate. A recently enacted State General Obligation Bond Program, Proposition 84, could potentially serve as a source of funds for unit acquisition.

4.4.2 Provision of Adequate Housing Sites

A key element in satisfying the housing needs of all segments of the community is the provision of adequate sites for housing of all types, sizes and prices. This is an important function in both zoning and General Plan land use designations. As an established City with the majority of remaining residential development opportunities to occur through infill, an active program for site identification is essential.

Land Use Element/Zoning Ordinance

Planning and regulatory actions to achieve adequate housing sites offering a range of housing types and styles include the Land Use Element of the General Plan and the Zoning Ordinance. A variety of residential types are provided for in Cypress, ranging in density from one to 20 dwelling units per acre, with higher densities achievable through the City's density bonus provisions. The residential development capacity under the Cypress Land Use Plan is adequate to meet the City's share of regional housing needs, which has been identified as 792 dwelling units over the next five years. The City's Zoning Ordinance contains density bonus as incentive for lower income housing and senior housing, and is discussed in detail in Section 4.4.3.

Site Suitability Criteria

Low and moderate income housing development should be located on sites which are not only physically adequate but also suitable for such development. These aims can be facilitated by having a set of "site suitability criteria" by which to judge the merits of potential project sites. These criteria will provide a yardstick for the City to identify and evaluate potential sites for low and moderate cost housing. Criteria for affordable housing could be similarly implemented through the City's Zoning Ordinance.

In establishing its own criteria, the City should consider those already set forth by other jurisdictions, including the State and Federal governments. One example of such criteria is the "Site Ranking and Environmental Evaluation" checklist of the California Housing Finance Agency (CHFA). That checklist provides a system for grading the suitability of sites with regard to the following:

- Services available to the Site (e.g., public transportation, essential shopping facilities, educational facilities, etc.)

- Neighborhood Characteristics (e.g., adjacent land uses, environmental considerations, noise levels, etc.).
- Physical Aspects of the Site (e.g., topography, off-site improvements, etc.).

The individual grades are combined into a composite "score" which enables identifying the best site for the proposed publicly assisted housing. These detailed CHFA criteria, along with others which are generally employed will be considered by the City for incorporation into the Zoning Ordinance. The City's intent in adopting and implementing the criteria is not to be more restrictive than other levels of government.

Residential Site Inventory

Since the City is already developed to a large extent, the availability of sites for residential development may be difficult to identify. City planning staff have recently initiated a program to maintain an inventory of vacant and redevelopable residential sites in Cypress for use by interested parties in identifying development opportunities. This site inventory is distributed at the public counter.

Sites for Homeless Shelters/Transitional Housing

The City of Cypress has an estimated homeless population of between 10 to 35 persons. The majority of these individuals are single males with apparent drug or alcohol dependencies; few families are represented. Cypress has no emergency shelters within its boundaries, although motel vouchers are provided by Saint Irenaneous Catholic Church to provide shelter in emergency situations. Housing Element policy calls for the City to coordinate with local social service providers, such as local churches, to address the needs of the homeless. In addition, the City will amend its Zoning Ordinance to permit the development of transitional housing in multi-family residential zones in locations close to services, and to permit emergency shelters in commercial and industrial zones, subject to a Conditional Use Permit. These Zoning Ordinance revisions will be made no later than 1991.

4.4.3 Assist in the Development of Affordable Housing

New construction is a major source of housing for prospective homeowners and renters but generally requires public sector support for the creation of units affordable to lower income households. The following programs attempt to address the overall need for the development of affordable housing in Cypress.

Section 8 Rental Assistance Payments/ Housing Vouchers

The Section 8 rental assistance program extends rental subsidies to low income families and elderly which spend more than 30 percent of their income on rent. The subsidy represents the difference between the excess of 30 percent of the monthly income and the actual rent. The voucher program is similar to the Section 8 Program, although participants receive housing "vouchers" rather than certificates. Vouchers permit tenants to locate their own housing. Unlike in the certificate program, participants are permitted to rent units beyond the federally determined fair market rent in an area, provided the tenant pays the extra rent increment. The Reagan administration had proposed converting the Section 8 certificate program to a voucher system, which is expected to be implemented under the current Bush administration HUD Secretary.

The City of Cypress contracts with the Orange County Authority to administer the Section 8 Certificate/Voucher Program. As of January, 1990, a total of 112 households in Cypress were receiving rent certificates, with approximately ten additional households receiving vouchers. Approximately 20 percent of the City's subsidized households are senior citizen households compared to one-third Countywide. Large family households (3 or more bedrooms) comprise one-third of the recipients of rent subsidies in Cypress in contrast to a much lower proportion of large families (20%) in the County.

In order to address the apparent unmet need for large family rental housing, the City will expend approximately \$125,000 in redevelopment set-aside monies during the period of this Housing Element to provide subsidy to approximately eight large family Very Low income households. The City will transfer these funds to the Orange County Housing Authority for administration exclusively in Cypress. As the City generates additional tax increment, the City will continue to provide rental assistance to eight large family Very Low income households and potentially expand the rent subsidy program.

Density Bonus Program

The City of Cypress has incorporated provisions into its Zoning Code (Section 9.2B) to allow density bonuses in return for guarantees of affordable dwelling units in new construction as provided by State law. Prospective developers are provided with a list of standards for density bonus projects in the City, including tenant/owner income requirements,

rent/mortgage limits, length of affordability, and requirements that affordable units be of comparable quality to market rate units in the project. These standards are enforced through a Density Bonus Agreement which serves as a contract between the City and the developer. Annual monitoring of the density bonus units is conducted by the City's code enforcement officer.

State Assembly Bill 1863, 1989 statutes, amends Government Code Sections 65913.4, 65915, and 65917 pertaining to density bonus incentives. Pursuant to these changes in State density bonus law, if a developer allocates at least 20% of the units in a housing project to lower income households, 10% for very low income households, or at least 50% for "qualifying residents" (e.g. senior citizens), the City must either a) grant a density bonus of 25%, along with one additional regulatory concession to ensure that the housing development will be produced at a reduced cost, or b) provide other incentives of equivalent financial value based upon the land cost per dwelling unit. The developer shall agree to and the City shall ensure continued affordability of all lower income density bonus units for a minimum 30 year period. The City will need to reflect these revised State requirements in its Zoning Code and density bonus standards.

The City of Cypress encourages developers to provide affordable density bonus units. Since adoption of the City's Housing Element in 1985, a total of nine density bonus projects have been developed, providing 31 units of very low, low and moderate income housing. Based on a similar rate of developer interest, the five year goal of the Housing Element will be for the creation of 30 affordable density bonus units.

Mortgage Revenue Bond Financing

The County of Orange has established two revenue bond housing programs to increase the supply of affordable housing in the County - the Multi-Family Revenue Bond Program and the Single Family Residential Mortgage Revenue Bond Program. Under these programs, tax-exempt bonds are issued to provide funds for construction and mortgage loans to encourage developers to provide affordable rental and for-sale housing. The City of Cypress participates with Orange County in their multi-family and single family bond programs, and encourages developers to take advantage of available bond financing.

The Multi-Family Revenue Bond Program was developed in Orange County in 1982. This program is designed to make financing available to developers for the construction of multi-family residential rental units in the County. In order to receive financing through the bond program, developers must reserve for 10 years, 20 percent of the units for rental by families or individuals who earn 80 percent or less of the median family income in Orange County. In addition, for recent projects, half of the lower income units must be reserved for occupancy on a priority basis for tenants who generally earn 50 percent or less of the median income. Projects financed after the passage of the 1986 Tax Reform Act must commit their 20% designated units for the greater of 15 years or as long as the bonds are outstanding.

The Single Family Residential Mortgage Revenue Bond Program has existed in Orange County since 1980. The program is designed to provide mortgage loans to first-time homebuyers whose incomes do not exceed maximum Federal limits. Buyers must also intend to live in the homes as their principal residence. Mortgage loans offered under the bond program generally have lower interest rates than conventional loans. Loans are made available for attached and detached single family residences primarily in eligible developments at various locations throughout the County. A smaller portion of funds is available for existing or resale units County-wide. The City will continue to encourage use of the single-family bond program to provide affordable housing for first time homebuyers and moderate income households.

Non-Profit Construction

A non-profit housing corporation works to develop, conserve and promote affordable housing, either owner or renter-occupied. Particularly in relation to senior citizen housing (such as HUD Section 202 projects), the non-profit is often a local religious organization interested in developing affordable housing. The non-profit is often involved with what is called "assisted housing", where some type of government assistance (such as Section 8) is provided to the individual household to keep rents affordable. Housing corporations can work with assisted housing in several ways.

1. The non-profit may assemble a development package and sell it to a profit-motivated developer. The package usually consists of a site, project design, the necessary permits, and, in some cases, preliminary financing commitments. The advantage of this method is that the non-profit can get low- and moderate-income housing built while ending its involvement early in the process and going on to other projects. The disadvantage is that the non-profit may lose control over the development at the time of sale. However, the non-profit could negotiate to retain some control over the project in the contractual agreement between it and the developer.
2. The non-profit may participate in a joint venture with a profit-motivated developer. Though it usually performs the same functions as in the first method, the non-profit can retain more control over the development and gain hands-on development experience while benefiting from the financial resources of the for-profit developer. In this option, however, the non-profit has a longer involvement and will have to negotiate the rights and responsibilities of the two partners.
3. In the third approach, the non-profit is the developer. In this case, the group must employ staff with necessary expertise or rely heavily on consultants. In return, the group has total control over the development. This option requires more risk, money, time, effort, and capability on the part of the non-profit.

A non-profit corporation can help meet the goals for additional housing by implementing or assisting with the implementation of programs described in this element. The City should coordinate with local non-profit groups to facilitate the development and improvement of both senior citizen and low cost housing in Cypress.

Land Assemblage and Write-Down

The City can utilize both CDBG and redevelopment set-aside monies to write down the cost of land for the development of senior citizen and/or affordable housing. The intent of this program is to reduce land cost to the point that it becomes economically feasible for a private (usually not-for-profit) developer to build units which are affordable to low/moderate income families. As part of the land write-down program, the City may also assist in acquiring and assembling property and in subsidizing on-site and off-site improvement costs.

The Cypress Redevelopment Agency has purchased the Cypress Elementary School site for the expansion of the existing Cypress senior citizen multi-purpose center and for the development of an affordable senior citizen housing project. Approximately two of the site's total six acres are to be developed with 124 units of senior rental housing, equating to a density of 62 units per acre. The Agency intends to write down the cost of the land approximately \$5/square foot in exchange for deed restrictions on the rent and occupancy of 20 units for Very Low income households, and an additional 10 units for low income households. This will result in a total land write-down subsidy of approximately \$425,000, which will be funded through the City's redevelopment set-aside fund.

Home Sharing

Many seniors who would prefer to live independently resort to institutionalized living arrangements because of security problems, loneliness, or an inability to live entirely independently. Senior Meals and Services, Inc. began a shared housing program in September, 1989 which assists seniors in locating roommates to share existing housing in the community. The program serves Cypress residents as well as Los Alamitos, Seal Beach, Stanton, and Midway City. The shared housing coordinator is available at the Cypress Senior Center on Fridays from 11 A.M. to 1 P.M., and can be reached at (714) 894-9779. Services offered include information and referral, outreach, client counseling, placement and follow-up.

The shared housing program provides an alternative option to Cypress' elderly residents which allows them to remain in their homes. The program's administrator indicates a total of 14 seniors in Cypress have registered for the program in its first five months in operation, and four roommate matches have been made. All of the programs registrants to date are Very Low Income, with incomes below \$15,000 annually. Seventy percent are single, female-headed households. While Senior Meals and Services has conducted some educational outreach on the program, the City of Cypress

could enhance these efforts through program advertisements in the City newsletter, and through sponsoring public service announcements on cable television.

Reverse Mortgage Program

The most substantial asset of most elderly homeowners is their home, which usually increases significantly in value with inflation. And while owning a home may provide a rich asset base with the onslaught of retirement and a fixed income, many elderly homeowners quickly become income poor. Home maintenance repairs multiply as the home ages, and the rising costs in home utilities, insurance, taxes, and maintenance often get deferred altogether, creating an unsafe and often depressing living environment for the senior.

An alternative option for elderly homeowners is to draw needed income from the accumulated equity in their homes through a reverse mortgage. A reverse mortgage is a deferred payment loan or a series of such loans for which a home is pledged as security. Qualification for the loan is based primarily on property value rather than on income, allowing the elderly homeowner on a fixed income to receive a loan for which he or she would not otherwise qualify. Most reverse mortgage programs permit homeowners to borrow up to 80 percent of the assessed value of their property, receive needed principal of up to 25 percent of the loan, and then receive monthly annuity payments for the life of the loan.

The City could work with an existing social service group, such as Senior Meals and Services, Inc., in establishing a reverse mortgage program for seniors. Rather than making the loans themselves, the City/social service group's role could be to facilitate the initiation of reverse mortgage loans through the following steps. First, the City/social service group would need to provide educational and counseling services to seniors interested in pursuing a reverse mortgage. Second, the City/social service group would need to work with local lending institutions which currently provide these loans to gain a thorough understanding of the application process. The City/social service group could then work with the seniors to complete the loan applications and assist in providing any other necessary information to the bank. Based on available information, the following companies and lending institutions are known to offer reverse mortgage loans in the Orange County area:

1. Security Pacific National Bank, City of Downey
(213) 869-1056
2. Capital Holding
1-(800) 431-8100
3. Providential Home Income Plan
(714) 793-2309
4. American Homestead
1-(800) 233-4762

Shared Equity Program

Equity sharing allows lower income households to purchase a home by sharing the costs of home ownership with a sponsor such as a local Housing Authority. The sponsor and the buyer would together provide the downpayment and purchase costs to buy a house. When the house is sold, the equity earned through appreciation is split between the occupant and the sponsor according to an agreement made prior to purchase. .

The design of a shared equity program depends on the co-investors, the source of funds, and community needs. A program can be as simple as a partnership where the occupant and sponsor purchase the home together and share the proceeds upon sale of the property in the same ratio as purchase costs were shared.

This program serves as a financing tool to provide homeownership opportunities to low and moderate income households. While shared equity financing does occur in the private market, purchase terms are often not in the best interest of the occupant. It is therefore recommended that the City work with the Housing Authority or a non-profit housing group to offer shared equity as a homeownership option to low and moderate income households. The five year goal of this program is to offer downpayment assistance to ten households.

4.4.4 Remove Governmental Constraints

Under present law, the Cypress Housing Program must include the following:

Address and, where appropriate and legally possible, remove governmental constraints to the maintenance, improvement, and development of housing.

Zoning Ordinance

The City of Cypress developed a comprehensive Zoning Ordinance to implement its General Plan. The following regulations in the Ordinance have an effect on the conservation and development of affordable housing in Cypress:

- Land use standards and development standards.
- Density and other incentives for affordable housing.
- Provisions for specific plan regulations.

While many of these regulations have a positive effect on affordable housing, some regulations do add to the cost of development. However, the City's standards cannot be considered excessive in comparison with many communities and are considered to be the minimum necessary to ensure a certain level of quality development in the City.

Efficient Processing

The Cypress Community Development Department has a streamlined review process. Residential projects in Cypress generally receive concurrent processing and are governed by one level of decisionmaking body, thereby shortening review time and minimizing related holding costs. The goal for this program is to establish a system for priority review of affordable housing applications.

Development Fees

Development fees have been set at a level necessary to cover the costs to the City and to make appropriate contributions to the community. However, these fees contribute to the cost of housing, and may constrain the development of low priced units. The City has reduced and/or waived certain development fees for the provision of affordable housing, and will continue to provide subsidized fees to improve the feasibility of low and moderate income housing projects.

4.4.5 Equal Housing Opportunity

In order to make adequate provision for the housing needs of all economic segments of the community, the housing program must include actions that accomplish the following:

Promote housing opportunities for all persons regardless of race, religion, sex, family size, marital status, ancestry, national origin, color, age or physical disability.

More generally, this program component entails ways and means to promote equal housing opportunity.

Equal Housing Opportunity Services

The County of Orange allocates funds to the Orange County Fair Housing Council on behalf of the nonentitlement cities participating in the County's urban grant application. The 1989 contribution was \$75,000. The Fair Housing Council provides the following types of services: housing discrimination response, landlord-tenant relations, housing information and counseling, and community education programs. In order to achieve resident awareness of the availability of these services, the City of Cypress will place informational flyers and brochures in key locations throughout the community, including the library, community center, senior center, and at the public counter at City Hall.

TABLE 3
HOUSING PROGRAM SUMMARY

Housing Program	Program Objective	5-Yr. Goal (# Units to be Assisted)	Funding Source	Responsible Agency	Time Frame
1. <u>Conserving & Improving Existing Affordable Housing</u>					
a. Community Development Block Grant	Maintain quality of housing in established neighborhoods, particularly for very low and low income households.	Rehabilitation Assistance to 75 lower income households through loans, grants and rebates.	CDBG, Future Redevelopment Set-Aside	Community Development Department	Ongoing
b. Rental Rehabilitation Program	Provide rehabilitation assistance to substandard apartment complexes.	Advertise availability to apartment owners, with a five year assistance goal of 50 units.	HUD	Community Development Department	Two years
c. Home Weatherization Improvements	Provide weatherization improvements to reduce housing costs.	Provide informational brochures to City residents.	So. Cal Edison	Community Development Department; So. Cal. Edison	Ongoing
d. Code Enforcement	Bring substandard units into compliance with code.	Augment to provide information regarding available rehabilitation assistance.	Department Budget	Community Development Department	One year
e. Conservation of Existing Subsidized Housing	Provide for the continued affordability of the City's low and moderate income housing stock.	Solicit interest of non-profit housing corps in taking ownership of affordable housing projects as necessary to maintain affordability.	Future Redevelopment Set-Aside as necessary	Community Development Department	As required

TABLE 3
HOUSING PROGRAM SUMMARY
(continued)

Housing Program	Program Objective	5-Yr. Goal (# Units to be Assisted)	Funding Source	Responsible Agency	Time Frame
2. <u>Provision of Adequate Housing Sites</u>					
a. Land Use Element/ Zoning Ordinance	Provide a range of residential development opportunities through appropriate land use and zoning designations.	Accommodate City's share of regional housing needs, identified as 792 d.u.s	None necessary	Community Development Department	Five years
b. Site Suitability Criteria	Establish specific criteria to evaluate potential project sites for affordable housing.	Incorporation of criteria into Zoning Ordinance.	Department Budget	Community Development Department	Two years
c. Residential Site Inventory	Enhance residential development opportunities.	Creation of residential site inventory.	Department Budget	Community Development Department	One year
d. Sites for Homeless Shelters/Transitional Housing	Facilitate the development of transitional or emergency housing for the homeless through revisions to the Zoning Ordinance	Work towards development of a transitional housing facility/emergency shelter.	Department Budget	Community Development Department	Amend Zoning Ordinance within one year

TABLE 3
HOUSING PROGRAM SUMMARY
(continued)

Housing Program	Program Objective	5-Yr. Goal (# Units to be Assisted)	Funding Source	Responsible Agency	Time Frame
<u>3. Assist in Development of Affordable Housing</u>					
a. Section 8 Assistance Payment/Housing Vouchers	Extend rental subsidies to lower income families and elderly.	Continued subsidy to 112 households, with subsidy to an additional 8 Very Low income large families.	HUD-Section 8 Cert. and Housing Vouchers; Redevelopment Set-Aside	County Housing Authority; Cypress Community Development Department	Ongoing
b. Density Bonus Program/Other Equivalent Incentives	Encourage devel- opment of housing for seniors and low income households through provision of density bonus/other equivalent incen- tives.	Revise City Zoning Code to reflect changes in State Density bonus law. Facilitate crea- tion of 30 afford- able units.	Future Redevelopment Set-Aside	Community Development Department	Revise Zone Code within one year
c. Mortgage Revenue Bond Financing	Increase supply of rental and ownership units affordable to low and moderate income households.	Take advantage of affordable housing bond financing as available.	Revenue Bonds	Orange County; Cypress Community Development Department	As avail- able
d. Non-Profit Construction	Provide expanded affordable housing opportunities in Cypress.	Coordinate with local non-profit groups to increase supply of affordable housing.	None necessary	Community Development Department	Ongoing

TABLE 3
HOUSING PROGRAM SUMMARY
(continued)

Housing Program	Program Objective	5-Yr. Goal (# Units to be Assisted)	Funding Source	Responsible Agency	Time Frame
e. Land Assemblage and Development Incentives	Assemble property and extend write- down grants and other development incentives to non-profit developers to increase supply of affordable housing stock.	Provide land write-down to facilitate development of 124 senior rental units.	Redevelopment Set-Aside; HUD-CDBG	Redevelopment Agency; Community Development Department	Two years
f. Home Sharing	Assist seniors in locating roommates to share existing housing.	20 roommate matches per year.	State HCD	Senior Meals and Services, Inc.; Cypress Parks and Recreation Dept.	Ongoing
g. Reverse Mortgage Program	Allow seniors to remain in their homes by borrow- ing against accumu- lated home equity.	Coordinate with social service groups and lending institu- tions to facili- tate initiation of a reverse mortgage program and provide educational out- reach to seniors.	None necessary	Community Development Department	Three years
h. Shared Equity Program/Downpayment Assistance	Provide homeowner- ship opportunities to low and moderate income households through creation of equity partnerships.	Establish a program to offer down payment and/or mortgage assistance.	Future Redevelopment Set-Aside as necessary	Community Development Department; Redevelopment Agency	Three years

TABLE 3
HOUSING PROGRAM SUMMARY
(continued)

Housing Program	Program Objective	5-Yr. Goal (# Units to be Assisted)	Funding Source	Responsible Agency	Time Frame
<u>4. Remove Governmental Constraints</u>					
a. Zoning Ordinance	Ensure City standards are not excessive and do not unnecessarily constrain affordable housing.	Review any proposed new development standards to ensure not excessive.	None necessary	Community Development Department	Ongoing
b. Efficient Processing	Provide concurrent processing for residential projects to shorten review time and minimize related holding costs.	Establish priority review processing for affordable housing projects.	General Fund	Community Development Department	Ongoing
c. Development Fees	Provide reduced development fees for affordable and senior citizen housing.	Continue to offer reduced development fees for projects with an affordable housing component.	General Fund	Community Development Department	Ongoing
<u>5. Equal Housing Opportunity</u>					
a. Equal Housing Opportunity Services	Affirm a positive action posture which will assure unrestricted access to housing.	Provide tenant/landlord counseling, housing discrimination response, and related housing services.	HUD-CDBG	Orange County Fair Housing Council	Ongoing

Total units to be constructed: 792 total units/154 assisted units
Total units to be rehabilitated: 125 units
Total units to be conserved: 220 units (Sec. 8, Shared Housing)

ATTACHMENT A
STATE HOUSING ELEMENT REQUIREMENTS

STATE HOUSING ELEMENT REQUIREMENTS

REQUIRED HOUSING ELEMENT COMPONENT	REFERENCE
A. Housing Needs Assessment	
1. Analysis of population trends in Cypress in relation to regional trends	Data Report Section 2.1
2. Analysis of employment trends in Cypress in relation to regional trends	Data Report Chapter 5.0
3. Projection and quantification of Cypress' existing and projected housing needs for all income groups	Data Report Section 4.5
4. Analysis and documentation of Cypress' housing characteristics including the following:	
a. level of housing cost compared to ability to pay;	Data Report Section 3.5
b. overcrowding;	Data Report Section 3.3
c. housing stock condition.	Data Report Section 4.3
5. An inventory of land suitable for residential development including vacant sites and sites having redevelopment potential and an analysis of the relationship of zoning, public facilities and services to these sites	Housing Element Section 2.3
6. Analysis of existing and potential governmental constraints upon the maintenance, improvement, or development of housing for all income levels	Housing Element Section 2.2
7. Analysis of existing and potential nongovernmental and market constraints upon maintenance, improvement, or development of housing for all income levels	Housing Element Section 2.2

STATE HOUSING ELEMENT REQUIREMENTS (continued)

REQUIRED HOUSING ELEMENT COMPONENT	REFERENCE
8. Analysis of special housing needs: handicapped, elderly, large families, and female-headed households	Housing Element Section 2.1
9. Analysis concerning the needs of homeless individuals and families in Cypress	Housing Element Section 2.1
10. Analysis of opportunities for energy conservation with respect to residential development	Data Report Section 7.2
B. <u>Goals and Policies</u>	
1. Identification of Cypress' community goals relative to maintenance, improvement, and development of housing	Housing Element Section 3.1, 3.2, 3.3
2. Quantified objectives and policies relative to the maintenance, improvement, and development of housing in Cypress	Housing Element Section 3.1, 3.2, 3.3
C. <u>Implementation Program</u>	
An implementation program should do the following:	
1. Identify adequate sites which will be made available through appropriate action with required public services and facilities for a variety of housing types for all income levels	Housing Element Section 4.4
2. Program to assist in the development of adequate housing to meet the needs of low- and moderate-income households	Housing Element Section 4.4
3. Identify and, when appropriate and possible, remove governmental constraints to the maintenance, improvement, and development of housing in Cypress	Housing Element Section 4.4
4. Conserve and improve the condition of the existing affordable housing stock in Cypress	Housing Element Section 4.4
5. Promote housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin or color	Housing Element Section 4.4

ATTACHMENT B

**PRESERVATION OF ASSISTED HOUSING:
ANALYSIS AND PROGRAMS**

CITY OF CYPRESS

Preservation of Assisted Housing: Analysis and Programs

December 9, 1991

Cotton/Beland/Associates, Inc.
747 E. Green Street, Suite 400
Pasadena, CA 91101

**CITY OF CYPRESS
PRESERVATION OF ASSISTED HOUSING:
ANALYSIS AND PROGRAMS**

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INTRODUCTION

This report amends the Cypress General Plan Housing Element adopted on October 16, 1990, and subsequently determined by the California Department of Housing and Community Development to be in compliance with State law. The purpose of this amendment is to bring the Housing Element into compliance with a recent amendment of housing element law, codified in Government Code Section 65583. Under this law, jurisdictions must evaluate the potential for currently rent restricted low-income housing units to convert to non-low income housing and propose programs to preserve or replace those units.

Consistent with State requirements, this report includes the following parts:

1. An inventory of restricted low income housing projects in the City and their potential for conversion;
2. An analysis of the costs of preserving and/or replacing the units "at risk";
3. Quantified objectives for the number of "at-risk" units to be preserved;
4. An analysis of the organizational and financial resources available for preserving and/or replacing the units "at risk";
5. Programs for preserving the "at-risk" units.

INVENTORY OF UNITS AT RISK

This section identifies all of the low income housing units in the City of Cypress that are at risk of converting to non-low income housing uses between July 1, 1989 and July 1, 1999. Analysis in this section is divided into five year intervals. In each subsequent five year housing element update, "at risk" analyses will be developed for the ensuing ten year period.

This inventory includes all multi-family rental units assisted under federal, state, and/or local programs, including HUD programs, state and local bond programs, redevelopment programs, and local in-lieu fee, inclusionary, density bonus, or direct assistance programs. The inventory covers all units that are eligible to change to non-low income housing uses due to termination of subsidy contract, mortgage prepayment, or expiring use restrictions. This inventory was compiled by interviews with City staff, the County Housing Authority, HUD, and review of "Inventory of Federally Subsidized Low-Income Rental Units at Risk of Conversion" (California Housing Partnership Corporation), and "The Use of

Housing Revenue Bond Proceeds - 1990" (California Debt Advisory Commission).

All of the "at risk" units in Cypress are density bonus units, identified in the inventory in Tables 1 and 2. These units are in buildings containing both market rate units, and rent-restricted, density bonus units. The density bonus units are restricted through an agreement, as authorized by Government Code Section 65915, between the City and the project owners through which owners agreed to reserve those units for low income tenants through the HUD Section 8 certificate program for a period of ten years. HUD contracts on these units expire on or shortly after the expiration of the density bonus restriction. There are no Section 8 new construction projects in Cypress.

Units at Risk of Conversion Before July 1, 1994

There are no "at risk" housing units in Cypress scheduled to convert prior to July 1, 1994.

Units at Risk of Conversion Between July 1, 1994 and July 1, 1999

Description of Units: There are 22 units spread throughout seven developments in Cypress that are at risk of converting from low income housing between July 1, 1994 and July 1, 1999. The projects containing these "at risk" units are described in Table 1. All of the "at risk" units are density bonus units. The Cypress Creek project was also assisted through a County bond program. Participation in that program however, did not impose additional rent restrictions on the project beyond those of the density bonus program.

Four units contained in two projects will lose their rent restrictions in 1994. In 1997, 12 units contained in three projects lose their rent restrictions. Two units in one project become unrestricted in 1998 and in the first half of 1999, four units in one project will become unrestricted. None of the buildings containing "at risk" units are subject to restrictions on more than 27% of the total units in the development.

Conversion Potential: The likelihood that the "at risk" units will convert to non-low income housing will depend primarily on the availability and attractiveness of incentives encouraging their continued use as low income housing.

Under the Section 8 certificate program, HUD pays owners the difference between what tenants can pay (defined as 30 percent of household income) and what HUD and the local Housing Authority estimate to be Fair Market Rent on the unit. It is anticipated that owners of existing units with Section 8 certificate contracts will be given the option to renew those contracts when they expire.

TABLE 1
CITY OF CYPRESS
UNITS AT RISK OF CONVERSION BEFORE JULY 1, 1999

Proj. Name Address (incl. zip)	Owner: Name, Address	Type(s) of Gov't Assistance	Type/Length of Affordability Controls (including Sec. 8)	Earliest Potential Conversion Date(s)	# of Units Subject to Conversion	Total # of Units In Project	Tenant Type (i.e. Elderly, Family)	Bedroom Mix	Date Built (if known)	Condition (if known)
5582 Crescent Cypress, CA 90630	Rehn Juhng Liang 11735 Coloredstone Cir. Fountain Valley, CA 92708	Density Bonus Section 8	10 years	8/29/94	2	8	Family	4 - 2 br 4 - 3 br	8/84	
8626 Watson Cypress, CA 90630	Howard Andrews P.O. Box 2325 Carlsbad, CA 92008	Density Bonus Section 8	10 years	9/11/94	2	17	Family	4 - 1 br 13 - 2 br	9/84	
Cypress Creek Apartments 8601 Walker St. Cypress, CA 90630	Carl Loza 840 B Columbia St. Brea, CA 92621	Density Bonus Section 8 Orange County Multi-Family Revenue Bond Program	10 years	1/1/97	8	30	Family	30 - 2 br	8/87	
5542 Orange Cypress, CA 90630	Mr. Mike Russo 1421 N. Idaho La Habra, CA 90631	Density Bonus Section 8	10 years	2/1/97	1	6	Family	6 - 2 br	1/87	
CUP 85-11 5292-5302 Bishop Cypress, CA 90630	Cypress Cape Apts. 8522 Acacia Dr. Cypress, CA 90630	Density Bonus Section 8	10 years	5/20/97	3	20	Family	20 - 2 br	11/86	

TABLE 1
CITY OF CYPRESS
UNITS AT RISK OF CONVERSION BEFORE JULY 1, 1999
(Cont.)

Proj. Name Address (incl. zip)	Owner: Name, Address	Type(s) of Gov't Assistance	Type/Length of Affordability Controls (including Sec. 8)	Earliest Potential Conversion Date(s)	# of Units Subject to Conversion	Total # of Units in Project	Tenant Type (i.e. Elderly, Family)	Bedroom Mix	Date Built (if known)	Condition (if known)
9522 Walker Cypress, CA 90630	Kuosi Chang 12854 Arabella St. Cerritos, CA 90701	Density Bonus Section 8	10 years	1/13/98	2	8	Family	8 - 2 br	1/7/88	New, well maintained
Orange Ave Apts 6322-6340 Orange Cypress, CA 90630	Douglas DeYoung 355 Briston, Ste. C Costa Mesa, CA 92626	Density Bonus Section 8	10 years	4/1/99	4	23	Family	2 - 1 br 18 - 2 br 3 - 3 br	11/15/88	

TABLE 2
CITY OF CYPRESS
UNITS AT RISK OF CONVERSION AFTER JULY 1, 1999

Proj. Name Address (incl. zip)	Owner: Name, Address	Type(s) of Gov't Assistance	Type/Length of Affordability Controls (including Sec. 8)	Earliest Potential Conversion Date(s)	# of Units Subject to Conversion	Total # of Units in Project	Tenant Type (i.e. Elderly, Family)	Bedroom Mix	Date Built (if known)	Condition if known)
6402-6420 Orange Citrus Court Apts Cypress, CA 90630	Bob Stellecht 5500 Balsa Suite 100 Huntington Beach, CA 92649	Density Bonus Section 8	10 years	8/22/99	7	40	Family	16 - 1 br 24 - 2 br		
8781 Walker Cypress, CA 90630	K.C. Chang P.O. Box 2868 Anaheim, CA 92814	Density Bonus Section 8	10 years	10/26/99	8	42	Family	6 - 1 br 30 - 2 br 6 - 3 br	3/18/91	New
Cypress Sunrise Apartments 9031 Grindley St Cypress, CA 90630	Attn: Grace Lachina National Church Residences of Cypress 5821 Wellson Dr. Cypress, CA 90630	Section 202; Redevelop- ment funds	40 yr. mortgage - no pre-payment option; Redevelopment Agency reserves first right of refusal	Sept. 2027	74	74	Elderly	18 - effi- ciency 56 - 1 br	1988	

After the expiration of the ten year time period during which project owners are obligated to keep the units subject to Section 8 contracts, project owners may opt out of the Section 8 program. Although federal law protects renters of federally assisted projects through the establishment of procedures regulating the conversion of those units, these regulations do not apply to the projects listed above. The Low Income Housing Preservation and Resident Homeownership Act of 1990 (LIHPRHA) does not regulate the loss of Section 8 units or of local restrictions.

Similarly, there are currently no state or local restrictions on the conversion of these units. Government involvement in the preservation of these units for low income housing will therefore depend upon the existence and creation of incentives and other forms of assistance to current and potential owners.

The strongest incentive for an owner to opt out of the Section 8 program upon the expiration of the Section 8 contract period would be the ability to receive higher rents on the open market than through the Section 8 program.

In Cypress, median rents compiled between August and October 1989 were \$595 for a one bedroom, \$720 for a two bedroom and \$1075 for a three bedroom unit.¹

As stated above, under the HUD Section 8 program, participating building owners are entitled to receive HUD Fair Market Rents for their units with Section 8 contracts. On these units, HUD makes up the difference between 30% of a household's monthly income and the Fair Market Rent. Current limits on HUD Fair Market Rents in Orange County are \$703 for a one bedroom unit, \$828 for two bedroom unit and \$1037 for a three bedroom unit. These figures represent the maximum amount that can be paid to owners. Actual rents paid out on a particular unit can be significantly less. Rents for particular units are based on prevailing neighborhood rents as determined through rent surveys.²

One housing manager contacted for this analysis reported that for two bedroom units in the building she manages, Fair Market Rents paid by the Orange County Housing Authority were \$750 compared to the allowable level of \$863. The manager said that market rents for other similar units in the building range between \$825 and \$850.

In addition to purely monetary considerations affecting the relative attractiveness of participation in the Section 8 program, owner willingness to participate may also be affected by disincentives such as required compliance with administrative

¹City of Cypress Housing Element

²John Hambuch, Housing Manager for the Orange County Housing Authority

procedures, mandatory five year contract periods during which owners are required to stay in the program, and disinclination to rent to Section 8 tenants.

Given the strong rental market in Cypress, the nonmonetary disincentives involved in the Section 8 program and the fact that all of the "at risk" units are owned by for-profit entities, it is likely that the owners of the "at risk" units in Cypress will convert their units by opting out of the Section 8 program.

Additionally, although not likely, it is possible that owners will not have the option of renewing their Section 8 contracts. This could occur if the Section 8 program is terminated or if funds are not available for the "at risk" units. If Section 8 contracts are not available, owners will have no incentive not to convert their units.

Units at Risk of Conversion After July 1, 1999

State law does not require an analysis of units that are at risk of converting after July 1, 1999. These units are however set out in Table 2 in order to facilitate long-range planning for them.

COST ANALYSIS

The following analysis examines both the cost of preserving the affordability of the units at risk and the cost of producing new rental housing comparable in size and rent levels to replace the units which could convert. This analysis also includes a comparison of these respective costs.

The location of the units at risk in Cypress within developments that also contain market rate units makes it impractical to analyze the cost of obtaining all of the actual units subject to potential conversion. It would not be cost effective to split up ownership of these projects to acquire for preservation of only the rent restricted units. Therefore this analysis addresses the costs of supplementing and replacing Section 8 contract subsidies. The purpose of supplementing the Section 8 subsidy would be to make the amount that an owner would receive by continuing with the Section 8 contracts competitive with what the owner could receive on the open market.

Unfortunately, it is not possible to ascertain with much certainty the level of necessary subsidy. Both the current rent set by the Housing Authority and the actual market rent are unique to each project. The amount of subsidy, if any, required to keep owners in the Section 8 program by compensating for any difference between Section 8 and market rents and for the other disincentives of participating in the program will vary project by project.

HUD Fair Market Rents are established through neighborhood rent surveys to reflect prevailing market rents. Nevertheless, for at least one of the buildings in Cypress containing at risk units, Fair Market Rents were reported to be \$75 to \$100 below actual market rents obtainable for those units. In addition, a comparison of only rent levels does not take into account the need to compensate owners for the nonmonetary disincentives of participating in the Section 8 program discussed above. This analysis therefore analyses a range of per/unit, per/month subsidies of \$50 to \$150.

Units at Risk of Conversion Before July 1, 1994

No at risk units are scheduled to convert before July 1, 1994 in Cypress so no costs for preservation need to be incurred during this time period.

Units at Risk of Conversion Between July 1, 1994 and July 1, 1999

There are 22 density bonus units at risk of conversion between July 1, 1994 and July 1, 1999 in the City of Cypress. Assuming a per/unit per/month subsidy of \$50 to \$150 to obtain continued owner participation in the Section 8 Program, the per/year amount required for all 22 units would range between \$13,200 and \$39,600, plus administrative costs.

Additional subsidies would be needed to keep units affordable to low income tenants if Section 8 contracts are no longer available. The amount of subsidy necessary to replace lost Section 8 subsidies can not be determined without knowing the amount of subsidy each unit is receiving at the time of termination. It is, however, possible to roughly estimate the cost of keeping these units affordable to low and very low income households. The maximum subsidy amount required to keep units affordable to those two income groups can be estimated as the market rent in the City minus the maximum amount that low or very low households could pay (calculated as 30% of gross income).

This analysis assumes that the subsidized units average two bedrooms in size and uses assumptions based on the average rent for two bedroom units in Cypress and current affordable rent figure for very low income households of \$586.³ Under these assumptions the amount of per/unit subsidy required to keep the units roughly affordable to very low income households is \$242.

\$ 828	(average market rent)
-586	(affordable rent for very low income)
242	(necessary subsidy)

³HUD 1989 median Orange County household income was \$46,900.

At \$242 per unit per month, the total subsidy required for all 22 units would be \$5,324 per/ month or \$63,888 per year.

Low income households can afford to pay between \$548 - \$938 in monthly rents. Therefore, while households at the upper end of the low income range can afford average market rents in Cypress (\$828), those at the lower end of this range are still faced with spending greater than 30 percent of their incomes towards rent. However, as Section 8 certificates are limited to very low income households, no low income tenants currently occupy density bonus units in Cypress.

Constructing new housing to replace units "at risk" that convert from low income use would be substantially more expensive than subsidizing existing units. Estimates of land and construction costs range upwards from \$90,000 to \$120,000 per unit. These estimates are derived from discussions with nonprofit housing developers. For 22 units, new construction costs would range upwards from between \$2.0 and \$2.6 million.

The costs of new construction, however, could be partially offset through the combined use of market rate and low interest loans and grants.

Units at Risk of Conversion After July 1, 1999

State law does not require an analysis of units that are at risk of converting after July 1, 1999. These units are, however, set out in Table 2 in order to facilitate long-range planning for them.

COST COMPARISONS

Total costs of new construction to replace at risk units is considerably higher than the costs of subsidizing or replacing Section 8 contracts. Nevertheless, new construction or the acquisition of replacement housing by the City or by nonprofits would assure the continued affordability of the units to a degree that subsidies would not. The following section discusses resources for preserving or replacing these units.

RESOURCES FOR PRESERVATION

This section discusses two types of resources available for preserving "at risk" units: a) financial resources potentially available to purchase or supplement existing units, or to build replacement housing, and b) entities with the interest and ability to purchase and/or manage replacement units. Although the dispersal of units at risk in Cypress within market rate projects makes it less

likely that units will be preserved through acquisition, this is still an important resource to consider for possible purchase or construction of replacement units.

Financing/Subsidy Resources

There is a variety of potential funding sources available for potential acquisition, subsidization or replacement of units at risk. Due to both the high costs of developing and preserving housing and limitations on both the amount and uses of funds, a variety of funding sources may be required.

Redevelopment Set-Aside: State law requires redevelopment agencies to set aside at least 20 percent of tax increment revenues for increasing and improving the community's supply of low and moderate income housing, unless certain exceptions apply. The City of Cypress currently has a negative balance in its housing set-aside fund because of earlier relocation expenditures. Set-aside funds last year totaled around \$10,000. City staff however estimates that set-aside funds may grow between \$100,000 and \$200,000 per year, beginning in 1992, and is in the process of developing a work program to allocate expenditure of these funds. In addition, an area recently annexed into the northern portion of the City falls within the County of Orange redevelopment area, and may be eligible for expenditure of County set-aside monies.

CDBG Funds: Through the Community Development Block Grant (CDBG) program, HUD provides funds to local governments for funding a wide range of community development activities. Subject to certain restrictions, Cypress could use some of its CDBG funds to acquire or subsidize the "at risk" units so as to retain their availability for use as low income housing. Yearly CDBG allotments for Cypress generally range from \$50,000 to \$150,000.

Housing Authority Reserves: Other potential sources of funding are the reserves of housing authorities. The Orange County Housing Authority currently has roughly \$8.5 million to use to provide housing opportunities throughout the County. This money is subject to some restrictions and priority is given to projects which provide for the leverage and recycling of funds.

General Revenues: The City does not currently fund housing programs out of general revenue funds and, consequently, does not have any general revenue funds set aside for housing.

Orange County Affordable Housing Clearinghouse: The Orange County Affordable Housing Clearinghouse is a consortium of lending institutions and community groups focused on providing funds for affordable housing through team lending. Sixteen lending institutions are currently members of the coalition. Because the coalition is new and is still in the process of being set up, it does not currently have a track record in the community. However the financial assets and expertise of coalition members suggest that this should be a significant source of funds for low income housing in Orange County in the future. When

contacted, a representative of the Clearinghouse indicated that the Clearinghouse would be very interested in working with "at risk" units in Cypress.

Administrative Resources

An alternative to providing subsidies to existing owners to keep units available as low income housing is for public or non profit agencies to acquire or construct housing units to replace "at risk" units lost to conversion. Nonprofit ownership assures the future availability of purchased units as low income housing. Three nonprofit agencies in Orange County contacted for this analysis were potentially interested in purchasing and or managing "at risk" or replacement units in Cypress.

The Orange County Community Housing Corporation (OCCHC): OCCHC is the oldest and largest nonprofit affordable housing developer in Orange County. With assets exceeding \$6.6 million, OCCHC has been involved in 14 developments throughout Orange County. OCCHC participates in the management as well as the development of low income housing and expressed interest in "at risk" units in Cypress.

Civic Center Barrio Housing Corporation: Civic Center Barrio Housing Corporation also has considerable experience in, and resources for, the development and or management of low income housing and has also expressed interest in "at risk" units in Cypress. Barrio Housing owns and operates over 130 housing units in Orange County and San Diego County and has been involved in the development of over 400 additional units. Barrio Housing has staff of three full time employees and has been operating in Orange County for 16 years.

Council of Orange County, Society of Saint Vincent De Paul: The Society of Saint Vincent De Paul has also expressed interest in "at risk" units in Cypress. The Society provides many social services in Orange County such as food distribution and medical services. The Society is also in the process of developing a congregate housing project in Orange County and plans to continue to expand its housing operations. Including the value of donated time and goods, the Society has an annual revenue of \$9.8 million and employs a staff of 75 persons.

QUANTIFIED OBJECTIVES

Units at Risk of Conversion Before July 1, 1994

No units are scheduled to convert during this time frame.

Units at Risk of Conversion Between July 1, 1994 and July 1, 1999

It is the objective of the City to either retain or replace as low income housing all 22 units scheduled to convert between July 1, 1994 and July 1, 1999. A comparison of costs of preservation and resources available indicates that preservation of the "at risk" units is feasible. The City will continue to pursue new opportunities to replace low income restricted units lost through conversion to market rate units.

PROGRAMS FOR PRESERVATION

The City plans to monitor "at risk" housing units to ensure units will not be lost as low income housing. The City will subsidize units and/or work with non-profit housing groups in the community to explore possible new construction of replacement housing by nonprofits or nonprofit acquisition of existing buildings with "at risk" units. The following are specific actions that the City will take to protect or replace at risk units.

Monitor Units At Risk: Maintain contact with owners of "at risk" units as restriction expiration dates approach to determine whether Section 8 Contracts have been renewed or are planned to be renewed. Discuss with owners the City's desire to preserve the units at rents affordable to existing low and very low income tenants.

Time Frame: The earliest potential conversion dates for "at risk" projects in Cypress are as follows identified in the following table. The City shall contact project owners at least six months prior to potential conversion.

Project Address	# Units Subject to Conversion	Potential Conversion Date
5532 Crescent	2	8/29/94
8626 Watson	2	9/11/94
8601 Walker	8	1/1/97

Project Address	# Units Subject to Conversion	Potential Conversion Date
5542 Orange	1	2/1/97
5292-5302 Bishop	3	5/20/97
9522 Walker	2	1/13/98
6322-6340 Orange	4	4/1/99

Responsible Agency: Planning Department

Funding Source: CDBG, Redevelopment Set-Aside

Explore the Possibility of Rent Subsidies: If contacts with existing owners of "at risk" units indicate that units will be lost as affordable housing due to of the unavailability of Section 8 contract renewals or plans not to renew, the City will then explore alternative subsidy programs.

Time Frame: The earliest date of potential subsidy termination in Cypress is in August 1994. By the beginning of 1994, the City will begin evaluation of alternative rent subsidy programs for projects which would otherwise convert to market rate.

Responsible Agency: Planning Department, City Attorney's Office

Funding Source: CDBG, Redevelopment Set-Aside

Tenant Education: The City will work with tenants of "at risk" units in danger of converting. The City will provide tenants with education regarding potential tenant purchase of buildings, work with tenants to explore possible rent subsidies and act as a liaison between tenants and nonprofits potentially involved in constructing or acquiring replacement housing.

Time Frame: At least six months prior to subsidy termination, as identified in the schedule presented for monitoring units at risk.

Responsible Agency: Planning Department

Funding Source: CDBG, Redevelopment Set-Aside

Work With Nonprofits: Cypress will work with nonprofit housing providers to explore and if appropriate facilitate acquisition or replacement of "at risk" units.

Time Frame: If through the monitoring process a project is identified which will otherwise lose its status as affordable housing, immediately contact nonprofit housing providers to solicit interest in participation.

Responsible Agency: Planning Department

Funding Source: CDBG, Redevelopment Set-Aside, possibly federal, state or local grants

CYPRESS



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U P D A T E

Circulation

Element

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CITY OF CYPRESS

GENERAL PLAN

CIRCULATION ELEMENT

FEBRUARY, 1993

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INTRODUCTION

Cypress' circulation and transportation systems play important roles in shaping the overall structure and form of the City. Circulation relates to the actual physical transportation system such as streets, highways, bicycle routes, and sidewalks, as well as the modes of transportation which include cars, buses, trucks (transportation of goods), bicycles, ridesharing, and walking. These systems define land use patterns and determine how goods and people move through and within Cypress most efficiently to serve those uses. Land use and circulation must be closely tied to insure that the overall circulation system enables people to move in and around the City to locations where they live, work, shop, and spend leisure hours.

PURPOSE

The Circulation Element of the General Plan identifies the existing circulation system, circulation related issues, goals/policies, and provides a comprehensive circulation plan which includes various modes of transportation. The circulation system plan is formulated to meet present and future travel demand needs. This Element is a general guide for the planning, development, and enhancement of the City of Cypress circulation system, based upon the existing and anticipated land uses.

RELATED PLANS AND PROGRAMS

Transportation issues extend far beyond the Cypress city limits. As a result, regional agencies have developed programs to manage greater Los Angeles' transportation system. The City must consider other transportation system planning efforts as it pursues its own agenda.

Some of the related plans and programs measure the street system operations in terms of Levels of Service (LOS), which are qualitative descriptions of roadway operations which range from "A" to "F". A simple analogy is if LOS is compared to letter grades received in school where "A" is the best and "F"

is the worst. Intersections and street segments can be evaluated using various methodologies which result in number values which are similar to school test scores. Ranges of these number values/test scores then can be related to the various LOS letters/grades. This description of LOS provides a general background for the following discussion of related programs - a more detailed description of LOS standards is provided in Appendix A.

Measure M - Growth Management Program (GMP)

A requirement of the Orange County Measure M (1/2 percent sales tax increase), passed by Orange County voters, was for cities to develop a Growth Management Program (GMP). The stated purpose of the GMP is to ensure that the planning management and implementation of traffic improvements and public facilities are adequate to meet the current and projected needs of Orange County.

A traffic Level of Service (LOS) policy is to be established by each City, whereby LOS "D" is to be designated as the overall goal. However, it is recognized that some arterials are influenced by traffic factors beyond the control of the City; therefore, certain arterials may be designated to have a lower LOS goal. A Deficient Intersection List must also be developed for "problem" locations and if future developments significantly impact these locations, they may provide mitigation in the form of pro-rata share fees.

The requirements of the GMP are to ensure that new developments provide their fair share of public facilities and that services and infrastructure keep pace with anticipated growth. This is to be accomplished through various requirements which include annual evaluation of compliance with the LOS policies, a development phasing program, participation/interaction with other jurisdictions [(Growth Management Area (GMA))] to prioritize and receive funding for regional transportation improvements, provision of a Capital Improvement Program (CIP) to address specific City roadway needs, and development of a Transportation Demand Management (TDM) trip reduction program. Overall, the GMP requires development of a comprehensive program to address the need for public facilities to keep pace with development and ensure that new developments provide their fair share of improvements.

Proposition 111 - Congestion Management Plan (CMP)

Assembly Bill (AB) 471 (Proposition 111), as subsequently modified by AB 1791, requires every urbanized county with a population of 50,000 or more to adopt a Congestion Management Plan (CMP). Gasoline tax revenues for Cypress are subject to compliance with the Orange County CMP requirements.

The Orange County CMP Highway System (HS) is defined by Super Streets and State Highways and a minimum LOS E is required, unless the roadway was operating at a worse level when the baseline counts were conducted in 1991. Cities will be required to maintain LOS E or better operations (or baseline levels, if worse than E) on the CMPHS.

The CMPHS will be monitored through CMP requirements and if problems develop, the gas tax funding could be in jeopardy. One alternative to physical mitigation (widening of streets, etc.) is to develop a deficiency plan, whereby the CMPHS system as a whole is improved and air quality benefits are provided.

An important aspect of the CMP regulations is that new developments mitigate any significant traffic impacts to the CMPHS. This means that cities need to develop a review process whereby the traffic impacts of new projects are evaluated and impacts mitigated. This serves to ensure that the LOS standards on the CMPHS are maintained. In addition, there are requirements similar to the GMP, such as a Capital Improvement Program (CIP) submittal, a trip reduction program (TDM), and the need for interjurisdictional coordination.

South Coast Air Quality Management Plan

The South Coast Air Quality Management Plan mandates a variety of measures to reduce traffic congestion and improve air quality, including the Regulation XV Commuter Program which requires employers of more than 100 persons to prepare trip reduction plans, and the requirement that each jurisdiction develop an Air Quality Component within its General Plan. These and other measures are to be implemented gradually over several years. Cypress is subject to all AQMP requirements for local jurisdictions. In addition,

if a CMP deficiency plan is prepared, there is a requirement for air quality improvements as defined by SCAQMD.

SCOPE AND CONTENT

The existing circulation system within the City of Cypress, which includes various modes of transportation, was reviewed and analyzed. The existing operations of the City street system are examined; and bus, bicycle, rail, truck, and air transportation systems are addressed. Various circulation issues are reviewed, as well as their relevance to the General Plan.

The proposed Land Use Element is analyzed to determine the potential transportation impacts associated with the potential developments. Based on factors which include the circulation evaluation, existing constraints, and identification of City needs, transportation related goals and policies were developed. In addition, plans for each of the transportation modes were developed as a part of this Circulation Element.

RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS

The Circulation Element is related to several other elements of the General Plan and perhaps most closely related to the Land Use Element. Circulation facilities are designed around the Land Use Plan's pattern of land use. The type and design of the circulation system are determined by the type and density of surrounding land uses, as well as inter-city access patterns and loads.

The Circulation Element is also related to the Noise, Air Quality, Conservation/Open Space/Recreation, and Safety Elements. As described in the Noise Element, the circulation system is one of the major components of urban noise. The circulation system network also has a direct impact on natural resources, particularly air quality. In addition, factors of safety affect the location and design of circulation facilities and dictate the need for evacuation and emergency routes.

Because of its transportation-related issues, the Growth Management Element has a relationship with the Circulation

Element. In November 1990, Orange County voters approved Measure M which increases sales tax revenues in order to fund needed transportation improvements throughout the County. To qualify to receive a portion of these revenues, each jurisdiction within the County must adopt a Growth Management Element.

Major components of the required Growth Management Element concern transportation-related issues. For example, the Element must contain a policy that establishes a minimum Level of Service (LOS) to be maintained at intersections impacted by new development. In addition, the Element must contain a policy to promote TDM measures in the City and must contain a Comprehensive Phasing Program to ensure coordination between new development and roadway capacities. These issues will be addressed in a consistent fashion between the Circulation and Growth Management Elements.

EXISTING CIRCULATION SYSTEM

The following section evaluates the 1992 circulation system in Cypress. This information provides the basis to identify issues to be addressed by the Element.

REGIONAL ACCESS

The Artesia Freeway (S.R. 91), Garden Grove Freeway (S.R. 22)/San Diego Freeway (I-405), and San Gabriel River Freeway (I-605) are located north, south, and west of the City of Cypress, respectively, and provide regional access. The S.R. 22 has an east-west alignment and becomes the I-405 at its west end, approximately where Valley View Street crosses these two freeways. All of the above freeways are located one to two miles from the Cypress city limits.

Bloomfield, Moody, Valley View, and Knott Streets all have access at the S.R. 91 Freeway. The S.R. 22/I-405 can be directly reached via Valley View and Knott Streets. Freeway access at the I-605 is provided by Lincoln, Cerritos (north only), and Katella Avenues.

Valley View Street and Katella Avenue are both regional arterials, which are included on the CMP Highway System (HS). The CMPHS includes the Orange County Transportation Commission (OCTC) adopted Superstreet Network and all State Highways. Valley View Street and Katella Avenue are included in the Superstreet Network. Under a 20-year traffic improvement program, Orange County will establish 21 "superstreets" to be equipped with extra lanes, bus turnouts, left- and right-turn pockets, synchronized signal timing and other improvements.

ARTERIAL STREET SYSTEM

Existing Arterial System

A traditional grid system of arterials is provided within the City of Cypress, with the exception of areas occupied by the Los Alamitos Racetrack and the Forest Lawn Cemetery. The Los Alamitos Armed Forces Reserve Center (AFRC) also affects the grid system by limiting through access to and from the south.

The east-west arterials which were reviewed and are pertinent to the Circulation Element are Lincoln Avenue, Orange Avenue, Ball Road, Cerritos Avenue, Katella Avenue, and Oranewood Avenue. Those arterials with a north-south alignment which play an important role in the City's circulation system are Bloomfield Street, Denni Street, Moody Street, Walker Street, Valley View Street, Holder Street, and Knott Avenue.

The existing conditions of these arterials were documented based upon field studies, research of plans at the City of Cypress, and data provided by the City. Figure C-1 presents an overview of existing roadway geometrics, on-street parking, and current bicycle lanes. In addition, intersection lane geometric information was collected, which is presented on the ICU worksheets contained in Appendix A.

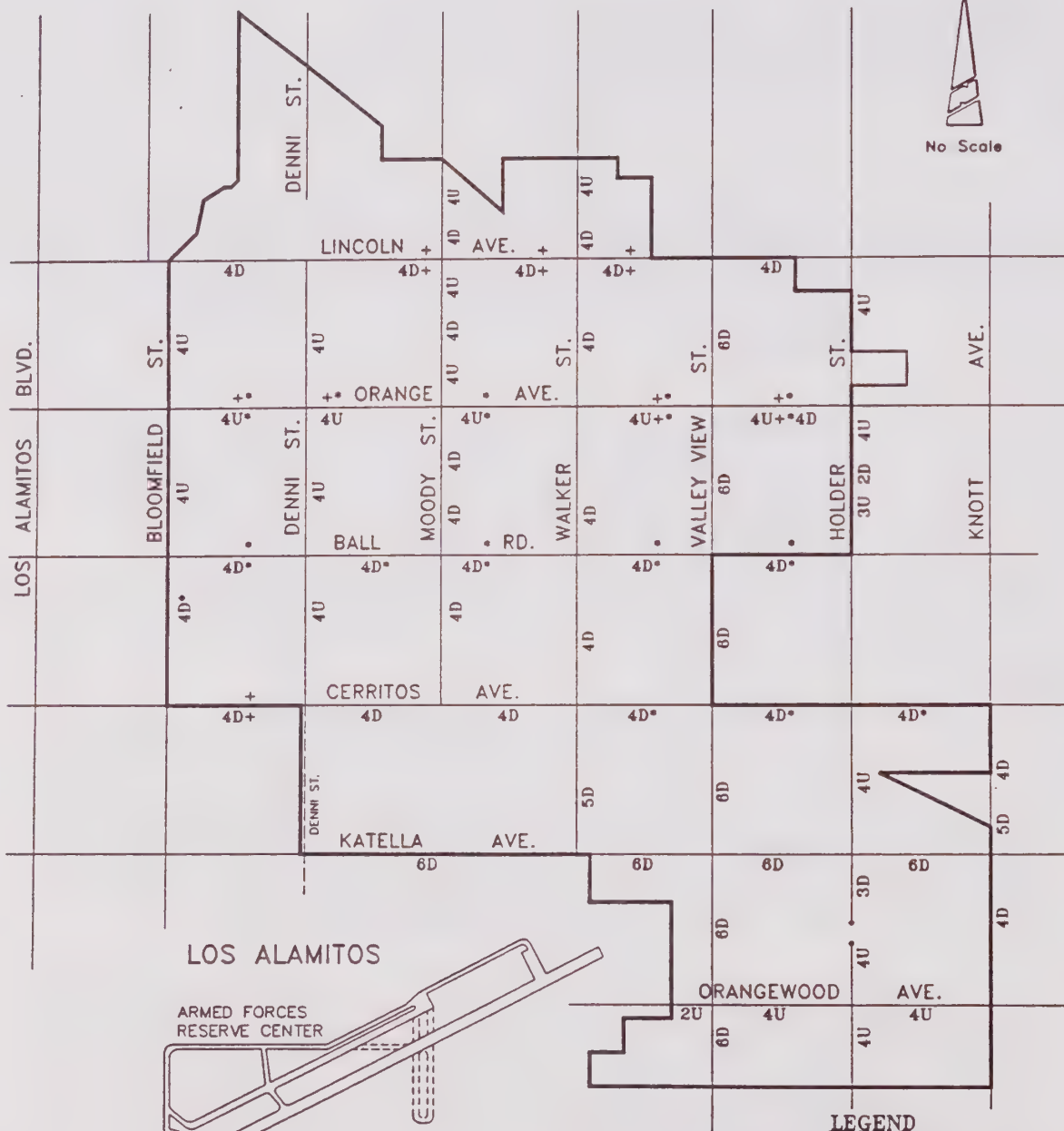
The existing conditions information was utilized in the existing Level of Service (LOS) analyses and provides an indication of where improvements are needed to provide the General Plan arterial street system, which is presented in the Circulation Plan section of the Element. A detailed figure of existing street widths and right-of-ways is provided in Appendix A and can be utilized to assist in determining deficient street segments.

Existing Traffic Volumes

Daily traffic counts were conducted throughout the City in May, 1991. These counts were supplemented by 1992 CMP counts conducted by the County, providing daily traffic volumes on street segments throughout the City. These



No Scale



LEGEND

- 4= NUMBER OF LANES
- U= UNDIVIDED
- D= DIVIDED
- + = PARKING ALLOWED
- * = BIKE LANE
CLASS II OR III
(PER PUBLIC WORKS)

SOURCE: Weston Pringle & Associates

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Figure C-1
Existing Arterials

existing daily traffic volumes are reflected in Figure C-2 and are also presented in Appendix A in Table 1.

As expected, the highest daily volumes were found on Valley View Street and Katella Avenue. The street segment which presently carries the most traffic is Valley View Street, between Katella Avenue and Orangewood Avenue, at 48,700 vehicles per day. On Katella Avenue, the highest observed daily volume was 39,600, just west of Walker Street.

A total of 13 intersections located along Valley View Street, Lincoln Avenue, and Katella Avenue were also analyzed for the Circulation Element, which required AM and PM peak hour turning movement counts at each intersection. The peak hours are generally designated as the highest volume hour within the AM peak period (7:00 - 9:00 AM) and the PM peak period (4:00 - 6:00 PM). The actual peak hour results provide supporting technical data and can be referenced from the ICU worksheets provided in Appendix A.

Existing Levels of Service

Given the influence of the GMP and CMP and the LOS requirements of these programs, the City of Cypress has adopted LOS D or better as an operational policy. However, given the influence of traffic factors on Valley View Street, Lincoln Avenue, and Katella Avenue, which are outside the control of the City of Cypress, it has been determined that LOS E would be the reasonable operational capacity for these arterials.

Figure C-1 illustrates the existing lane configurations in the City. These lane configurations can be related to daily volume capacities for a specified Level of Service (LOS). As described earlier, a LOS value can range from "A" (the best) to "F" (the worst), and represents a qualitative description of operating conditions. Given the existing arterial geometrics and striping, the daily volume capacities were noted based on County of Orange standards.

The daily volume capacities for LOS D operations (LOS E on the designated roads) are shown in Figure C-2. This provides a general comparison of existing traffic volumes to maximum



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allowable operations and offers an overview of the operations of the existing arterial system, given the existing traffic volumes. It should be noted that theoretical daily capacities contain many inherent assumptions which can affect actual capacities, therefore, the daily results are only general indicators of roadway operations. These factors need to be considered when reviewing the data.

Figure C-2 shows that the existing daily volume counts for the various street segments are within daily capacity limits for all of the City of Cypress arterial street segments. These analyses are presented in Table 1 found in Appendix A.

Intersection analyses were also conducted at the 13 study intersections located along Valley View Street, Lincoln Avenue, and Katella Avenue in the City of Cypress. The analyses utilized the intersection counts for the AM and PM peak hours, as well as data collection of the intersection geometrics. The Intersection Capacity Utilization (ICU) methodology was used, which is also required in the Orange County CMP and GMP. In general with this procedure, a comparison is made of critical intersection volumes to intersection capacity and these ICU results are then related to LOS values, ranging from "A" to "F". Using the analogy described earlier, the ICU can be compared to a test score received in school and the LOS would be the resulting letter grade based on that test score.

Table C-1 presents a summary of the existing intersection conditions. Ten of the 13 study intersections have LOS D or better operations during both morning and evening peak hours. The remaining three intersections have LOS A - D operations during the AM peak hour and LOS E operations during the PM peak hour. All intersections operate within the designated LOS E capacity applied to Valley View Street, Lincoln Avenue, and Katella Avenue.

The three intersections at LOS E are Valley View/Ball, Valley View/Katella, and Knott/Katella. These intersections are on the two roadways (Valley View and Katella) included in the CMPHS. The LOS standard to meet CMP requirements is "E" or "baseline", if it was measured worse than "E" in 1991 when the "baseline" counts were conducted. This confirms that the current operations are within CMP standards.

TABLE C-1
EXISTING
INTERSECTION ANALYSES SUMMARY

<u>INTERSECTION</u>	<u>EXISTING CONDITIONS</u>	
	<u>AM PEAK HOUR</u>	<u>PM PEAK HOUR</u>
Bloomfield/Lincoln	0.40/A	0.47/A
Moody/Lincoln	0.62/B	0.82/D
Walker/Lincoln	0.56/A	0.82/D
Valley View/Lincoln	0.60/B	0.67/B
Valley View/Orange	0.76/C	0.62/B
Valley View/Ball	0.74/C	0.97/E
Valley View/Cerritos	0.63/B	0.80/C
Valley View/Katella	0.85/D	0.93/E
Valley View/Orangewood	0.85/D	0.72/C
Lexington/Katella	0.42/A	0.55/A
Walker/Katella	0.61/B	0.59/A
Holder/Katella	0.43/A	0.54/A
Knott/Katella	0.75/C	0.91/E

The general LOS goal under GMP requirements is a minimum "D" operations. However, certain streets/intersections can be designated to have lower LOS standards, if certain conditions exist, as was described earlier. For the City of Cypress, it is reasonable to expect the Major Streets to have a lower (LOS E) standard, given that they serve regional, as well as local, traffic. The assumptions contained in this Circulation Element will also be consistent with the GMP as well.

BUS SYSTEM

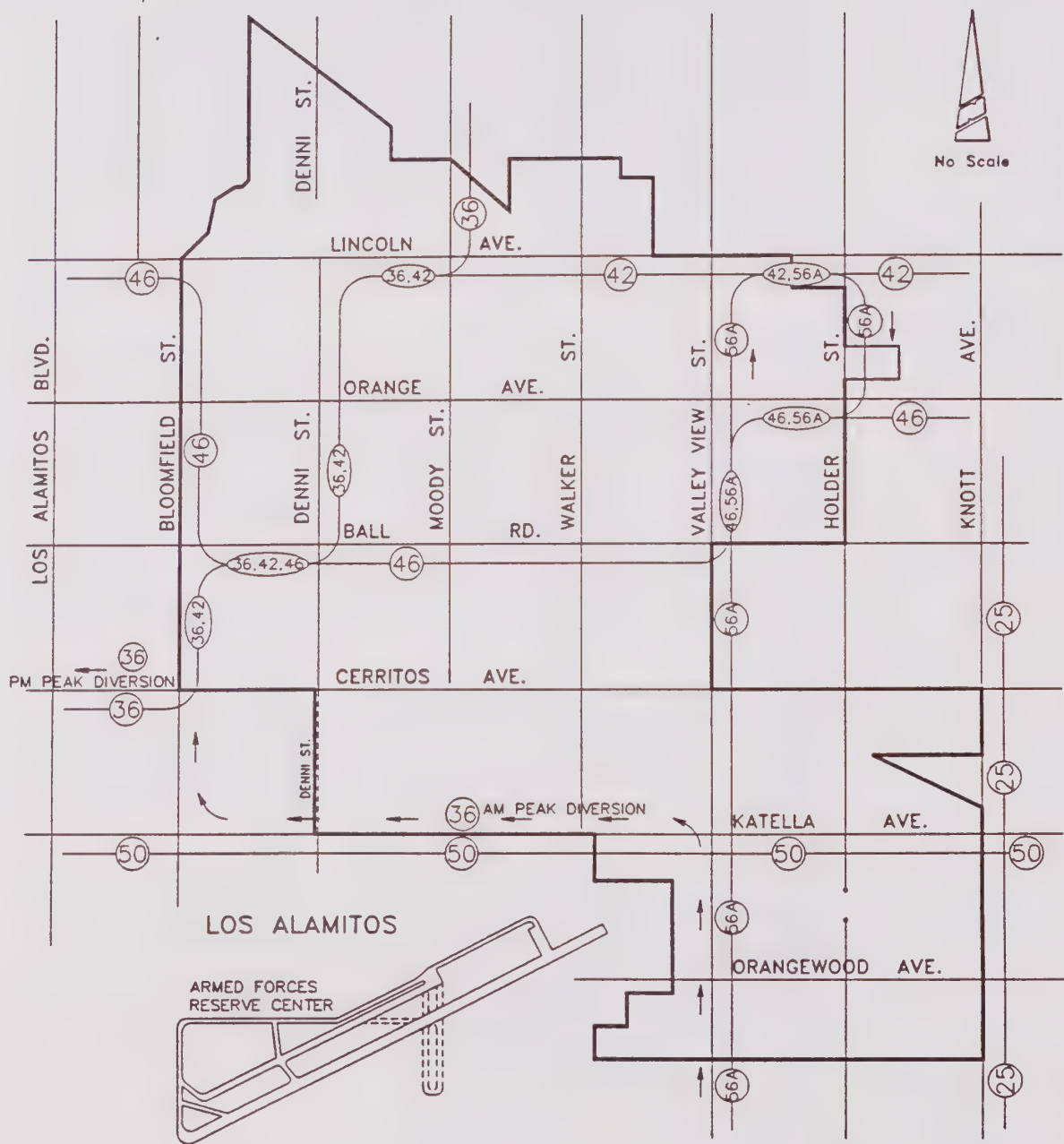
The City of Cypress is currently served by six OCTD bus lines (25, 36, 42, 46, 50, and 56A), as illustrated in Figure C-3. All of the routes, except Number 36, operate on all days of the week. Route 36 provides service on Monday through Friday only. The OCTD is now an affiliated agency of the Orange County Transportation Authority (OCTA), which was formed to better meet the transportation needs of Orange County.

There are other services offered through the OCTD Dial-A-Ride program and OCTA Rideshare. Dial-A-Ride provides "Demand Service", "Group Service", and "Dial-A-Commute", while OCTA Rideshare offers carpool matching, vanpool coordination, and telecommuting information.

The "Demand Service" provides curb-to-curb transportation for senior citizens and disabled persons. The "Group Service" is available to groups of eight or more people and must be requested at least three working days in advance. The "Dial-A-Commute" is designed for people who have a routine trip to work, school, etc., and can schedule at least one trip per week for a four week period.

BICYCLE PATH SYSTEM

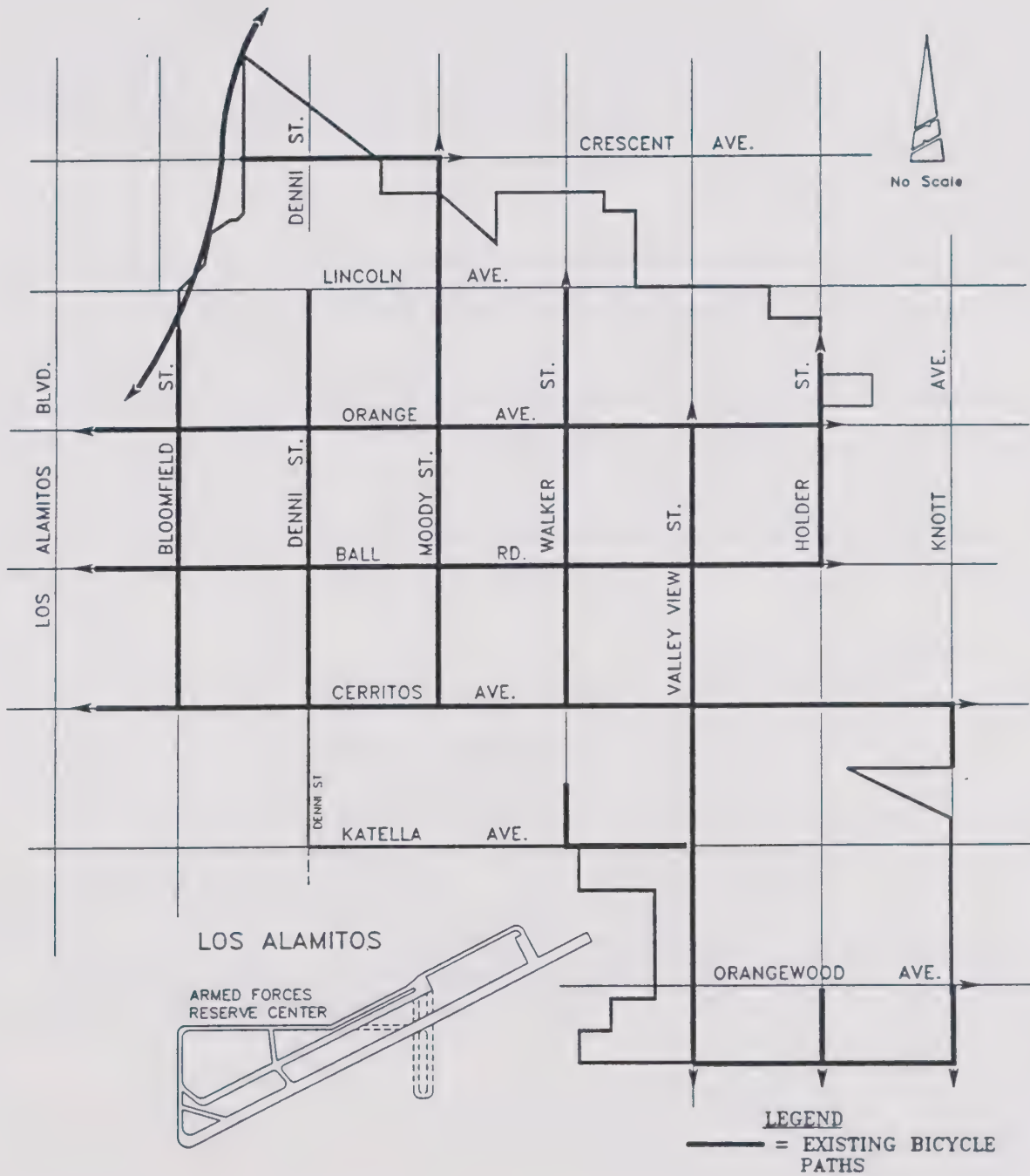
The existing bicycle path locations are shown on Figure C-4 and include on-street routes (both sign only and striped) and off-street paths. Some of the off-street bicycle paths utilize the sidewalks where there is sufficient width.



SOURCE: Weston Pringle & Associates

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Figure C-3
Existing Bus Routes



SOURCE: Weston Pringle & Associates

Figure C-4
Existing Bicycle Paths

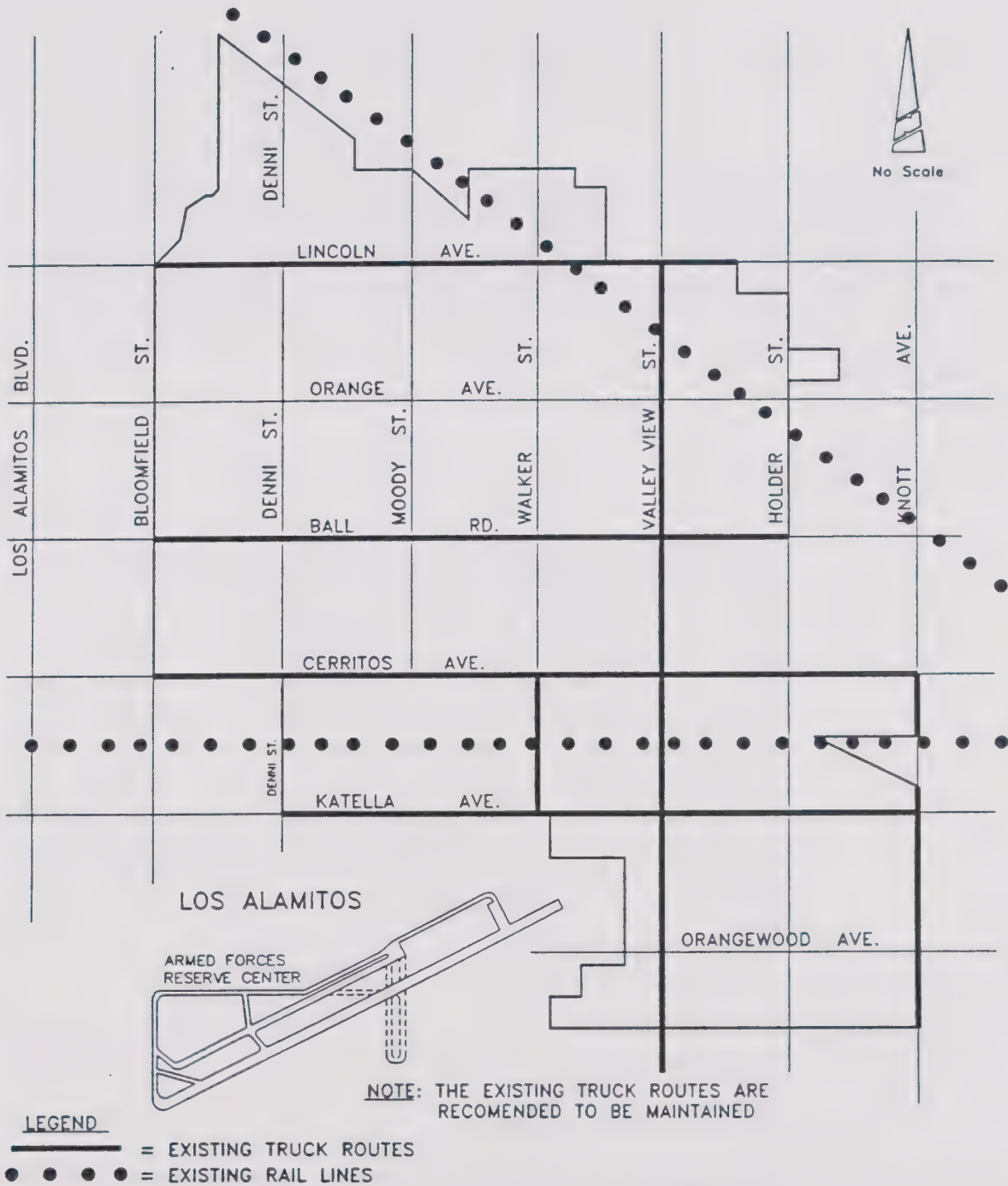
In addition, some field studies were conducted and it was noted that some striped bicycle routes exist that are only operational for part of the day. During portions of the day, parking is allowed within these bicycle lanes. While the CalTrans Highway Design Manual allows this type of situation with some provisions, however, it is not encouraged.

RAIL TRANSPORTATION

The existing Southern Pacific Rail Line, with a northwest-southeast alignment, located in the northeast corner of the City, was purchased by the Orange County Transportation Authority (OCTA) for potential use as a commuter rail line. It appears that this purchase eliminates freight use of the east-west rail line at the south end of the City, since it is a spur line off of the purchased main line. The existing rail lines in the City of Cypress are illustrated in Figure C-5.

TRUCK CIRCULATION

Truck routes are established to designate acceptable roadways to accessing and traveling through the City. These routes also serve to direct trucks away from streets which were determined to be inappropriate or inadequate to serve substantial truck traffic. On a local level, truck deliveries (i.e. moving vans) are allowed to serve locations on Secondary and even Local Streets, however, they must utilize the most direct route to and from the established truck routes. Figure C-5 illustrates the established truck routes for the City of Cypress.



SOURCE: Weston Pringle & Associates

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Figure C-5
Existing Truck Routes and Rail Lines

CIRCULATION ISSUES

A comprehensive network of regional freeways, local roadways, rail lines, and public transit routes serve the transportation needs of Cypress and surrounding jurisdictions. The following section identifies circulation issues and opportunities of concern as they relate to this transportation system. Future traffic volumes under General Plan buildout are projected, and the capacity of the General Plan circulation system to accommodate this traffic evaluated.

REGIONAL ACCESS

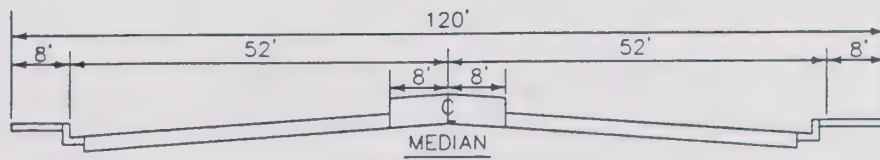
Cypress enjoys good regional access via the freeways in close proximity to the north, west, and south. Access to these freeways is primarily via arterial streets such as Katella Avenue, Valley View Street, Lincoln Avenue, and Knott Street. These arterial streets, especially Katella Avenue and Valley View Street, carry volumes which approach their arterial capacity. As employment increases in the Business Park and retail use expands along Lincoln Avenue, peak period congestion is anticipated that may in turn diminish the ease of freeway access. This is anticipated to be especially noticeable on Valley View and Knott Streets because of the interruption of the grid pattern caused by the Los Alamitos AFRC.

ARTERIAL STREET SYSTEM

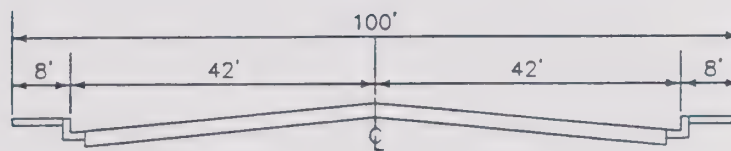
Roadway Classifications

The existing City of Cypress arterial system and classifications are based on the County Master Plan of Arterial Highways (MPAH). The three classifications of arterials in Cypress are "Major", "Primary", and "Secondary". Brief descriptions of these classifications are provided below and the street sections are illustrated in Figure C-6.

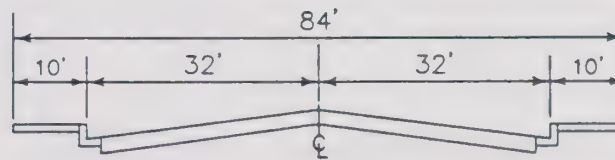
MAJOR STREET



PRIMARY STREET



SECONDARY STREET



Major Roadway: This classification calls for a 104 foot curb-to-curb width within a 120 foot right-of-way. A six lane, divided roadway can be provided within this street section. The estimated daily volume capacity for LOS D operations would be 50,600 vehicles per day, based on County of Orange - EMA standards. Presently, Valley View Street, Lincoln Avenue, and Katella Avenue are classified as Major Roadways.

Primary Roadway: A Primary Roadway is planned to provide an 84 foot curb-to-curb width within a 100 foot right-of-way. These geometrics can provide a four lane, divided street with a LOS D capacity of 33,800 vehicles per day. Streets within Cypress which now have a Primary designation are Moody Street, Ball Road, and Cerritos Avenue.

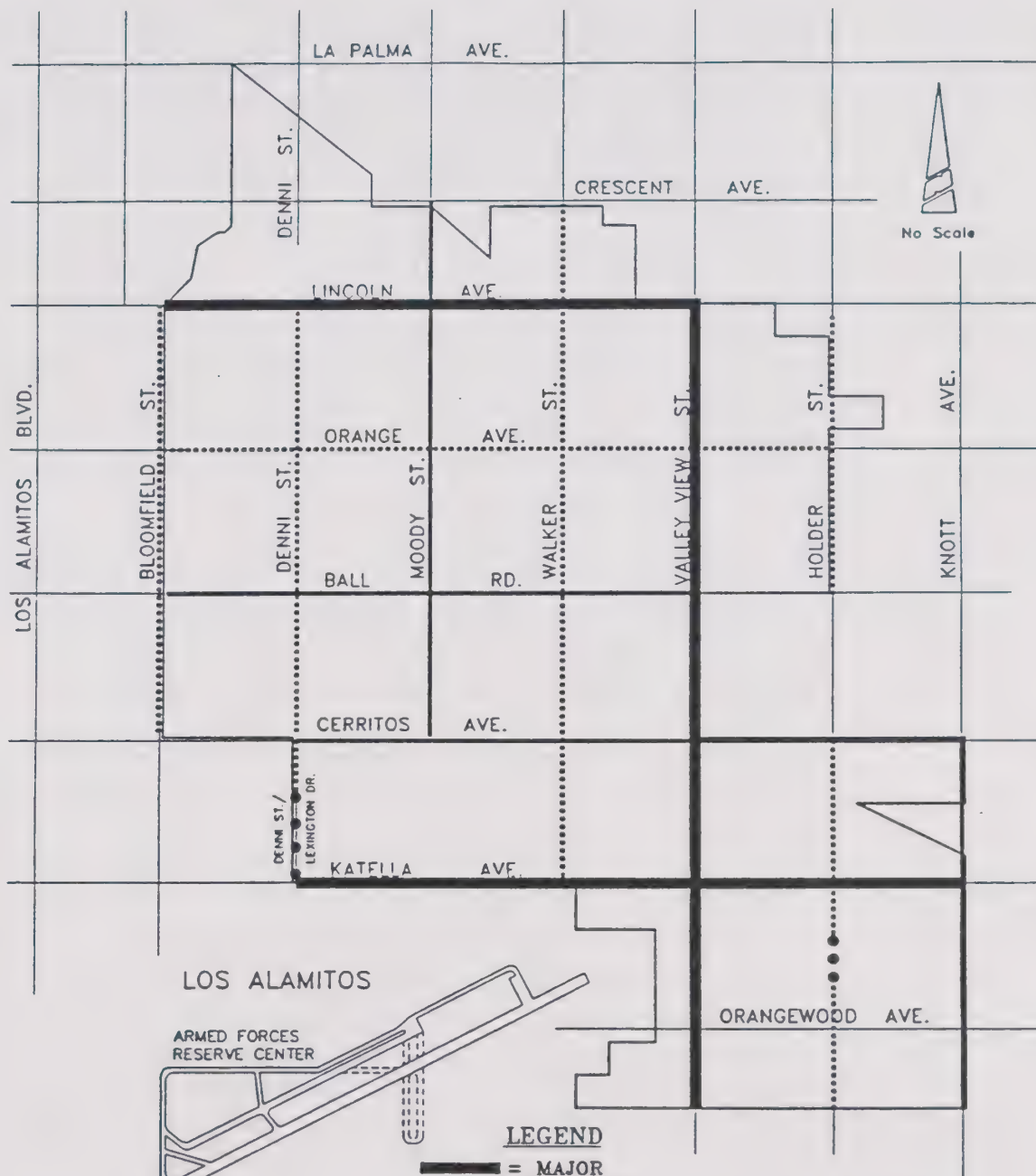
Secondary Roadway: Under a Secondary Roadway classification, a 64 foot curb-to-curb width within an 84 foot right-of-way is planned. Generally, a four lane, undivided roadway is provided with this classification, which results in a LOS D capacity of 22,500 vehicles per day. City of Cypress streets which currently have a Secondary designation are Bloomfield Street, Denni Street, Walker Street, Holder Street, and Orange Avenue.

Figure C-7 illustrates the City's General Plan roadway designations and identifies locations where street segments have not yet been constructed. The analyses described below evaluates the capacity of the City's existing General Plan arterial system to accommodate the anticipated development allowed under the Land Use Plan.

Future Traffic Volumes

The Circulation Plan incorporates data from a number of sources, including the Land Use Element, to design a balanced, functional, and efficient transportation system. The following section describes the assumptions utilized in the traffic study to determine the City's future transportation needs.

The Land Use Element is directly related to the Circulation Plan. The land use information was separated into 39 Traffic Analyses Zones (See Appendix A). The existing and proposed land uses were compared and trip generation



SOURCE: Weston Pringle & Associates

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Figure C-7
General Plan Arterial System

estimates were developed for the differences in the existing land use and General Plan land use. This allowed evaluation of the traffic impacts/reductions on a zone by zone basis. Table 2 in Appendix A contains the list of the trip generation rates utilized in the analyses, and Table 3 presents the existing and future land use assumptions as well as the net trip generations for each zone.

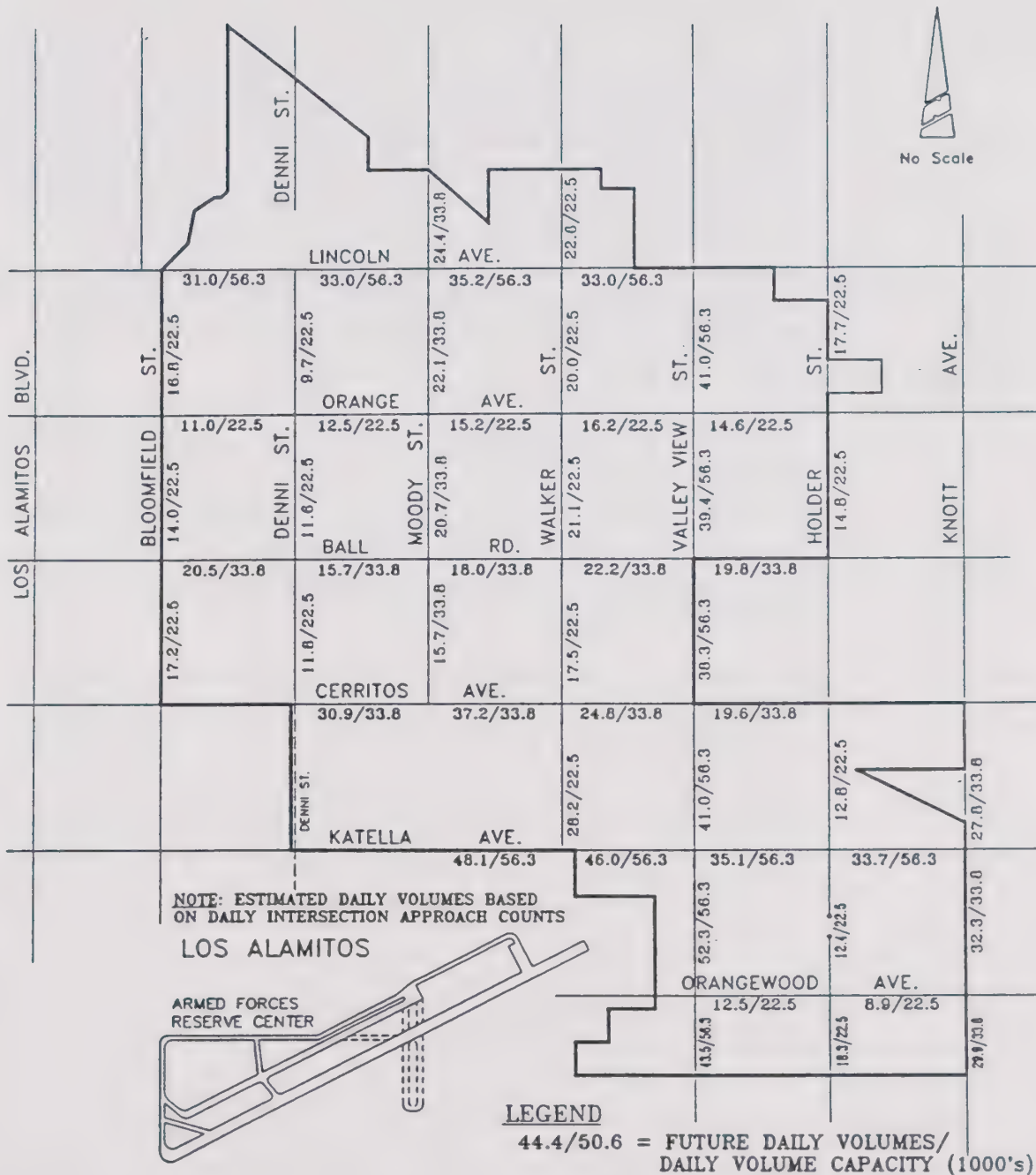
TDM reductions were applied to the business park uses, reflecting the City's commitment to the development of alternatives to the single person vehicle. In addition, reductions for "passby" traffic were applied to the retail trip generations. "Passby" traffic is a documented occurrence and simply accounts for vehicles that are already on the road system and simply stop at a retail use (i.e. on the way home from work, a patron stops at the grocery store).

The potential traffic impacts on the surrounding street system were estimated based on the net trip generations (presented in Appendix A, Table 3) and the projected trip distribution patterns. Given the traffic assignment methodology was performed manually, there is some overlap or "double counting" of trips occurring between uses, which is not accounted for. This results in an overstatement of some project related trips, which serves to account for traffic growth that could occur outside of this jurisdiction. Overall, when the various traffic influences are considered, the projected values were found to provide a reasonable projection of traffic conditions, given the proposed land uses.

Figure C-8 shows the future daily traffic volumes on the arterial street system based on buildout of the Land Use Plan. Peak hour volumes were also generated and their volume impacts at the study intersections were estimated. These volumes, which serve as a basis for the technical calculations, are provided in the ICU worksheets contained in Appendix A.

Future Levels of Service

Figure C-8 also shows the estimated roadway capacities for the General Plan arterial system. The roadway and right-of-way widths (shown in Figure C-6) are assumed to be in place for this future condition. The purpose is to determine if the planned road system can accommodate the anticipated traffic volumes under General Plan buildout. Upon review of Figure



SOURCE: Weston Pringle & Associates

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 UPDATE

Figure C-8
Future Daily Volumes/Capacities
(In 1000's)

C-8, it can be seen that the projected traffic volumes do not exceed the planned roadway capacities.

Utilizing data presented in Figure C-1 (Existing Arterials) and Figure 1 in Appendix A (Existing Street Widths and Right-of-Ways), the locations where arterial segment improvements will be needed in the future can be identified. A comparison of existing conditions (Figure C-1 and Figure 1) to the planned geometrics (Figure C-6 and C-7) indicates areas where upgrades will be needed. The most significant change will be the upgrade of Lincoln Avenue from a four lane roadway to a six lane arterial (104 foot roadway width within a 120 right-of-way).

The intersection analyses results under General Plan buildout are presented in Table C-2. It should be remembered that these intersections are located along Valley View Street, Lincoln Avenue, and Katella Avenue, for which the City has adopted an LOS standard of E. Many (8 of 13) of the intersections meet LOS D or better operations, even based upon existing roadway geometrics.

Of the five intersections most impacted by General Plan buildout, three could be mitigated through provision of the General Plan street widths/right-of-ways. The remaining two intersections, Valley View Street/Ball Road and Valley View Street/Katella Avenue, will require widening beyond the General Plan widths to accommodate added turn lanes at the intersections. The ICU worksheets contained in Appendix A reflect the assumed lane geometrics to provide LOS E and D operations.

Figure C-9 summarizes the principal traffic issues which face Cypress under General Plan buildout.

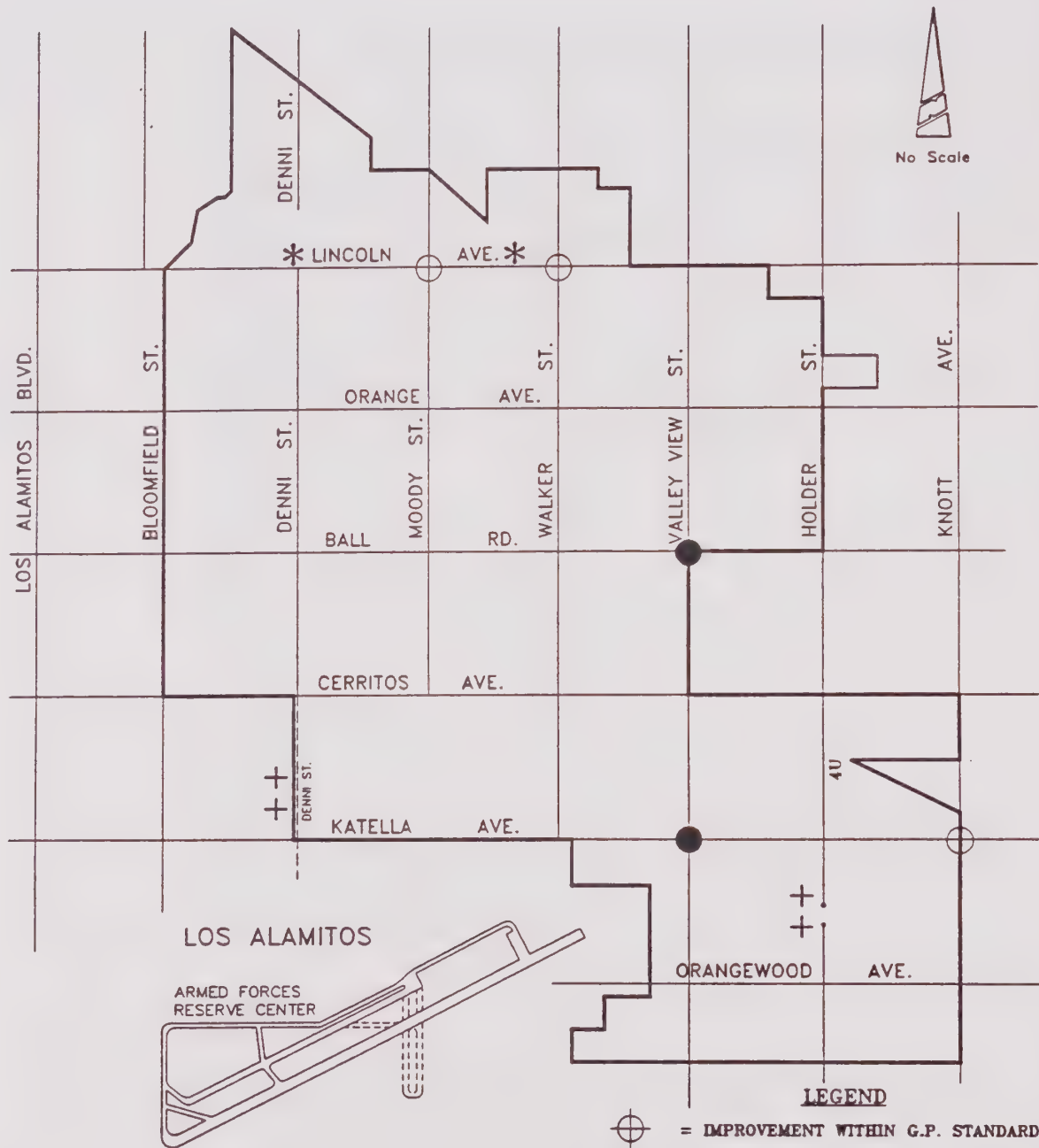
CMP, GMP, AND AQMP

Funding resulting from Proposition 111 and Measure M are dependent upon compliance with CMP and GMP requirements, respectively. Both programs are directly linked to transportation issues and have, as primary goals, to ensure that new developments mitigate their traffic impacts to the surrounding street system.

TABLE C-2
GENERAL PLAN
INTERSECTION ANALYSES SUMMARY

<u>INTERSECTION</u>	<u>G.P. VOLUMES EXISTING GEOMETRICS</u>		<u>G.P. VOLUMES POTENTIAL REQUIRED IMPROVEMENTS</u>		<u>G.P. VOLUMES^(a) LOS D IMPROVEMENTS</u>	
	<u>AM PK</u>	<u>PM PK</u>	<u>AM PK</u>	<u>PM PK</u>	<u>AM PK</u>	<u>PM PK</u>
Bloomfield/Lincoln	0.43/A	0.63/B	-----	-----	-----	-----
Moody/Lincoln	0.72/C	1.12/F	0.65/B	0.98/E	0.54/A	0.81/D
Walker/Lincoln	0.65/B	1.04/F	0.62/B	0.99/E	0.56/A	0.88/D
Valley View/Lincoln	0.75/C	0.90/D	-----	-----	-----	-----
Valley View/Orange	0.81/D	0.69/B	-----	-----	-----	-----
Valley View/Ball	0.75/C	1.04/F	0.71/C	0.98/E	0.67/B	0.89/D
Valley View/Cerritos	0.81/D	0.81/D	-----	-----	-----	-----
Valley View/Katella	1.12/F	1.04/F	0.99/E	0.97/E	0.89/D	0.85/D
Valley View/Orangewood	0.90/D	0.74/C	-----	-----	-----	-----
Lexington/Katella	0.72/C	0.75/C	-----	-----	-----	-----
Walker/Katella	0.86/D	0.80/C	-----	-----	-----	-----
Holder/Katella	0.67/B	0.73/C	-----	-----	-----	-----
Knott/Katella	0.78/C	1.04/F	0.78/C	0.94/E	0.78/C	0.87/D

(a) For informational purposes and to assist City staff in their future studies.



SOURCE: Weston Pringle & Associates

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Figure C-9
Traffic Issues

Although the specific requirements of the CMP and GMP differ, both include issues such as Level of Service (LOS) standards, monitoring of conditions, coordination with other jurisdictions, Transportation Demand Management (TDM) ordinances/application, and mitigation of impacts. The AQMP will supplement these two programs, although its focus is on air quality improvements.

Overall, these programs provide recognition that land use, transportation, and air quality issues are all interrelated. The requirements under each of these programs serve to ensure a safe, efficient transportation system, which is a primary goal of the Circulation Element of a General Plan.

HOLDER AND DENNI STREETS

Portions of Holder and Denni Streets are the two uncompleted connections of the arterial system identified in the existing Circulation Element. The incomplete Denni Street (Lexington Drive) link is just north of Katella Avenue, while the needed Holder Street section is south of Katella Avenue. Both of these links would provide additional north-south travel, which is critical in the City of Cypress.

The City of Cypress conforms to a typical grid street system, however, the north-south arterials are interrupted by the Forest Lawn Cemetery, the Los Alamitos Racetrack, and the Los Alamitos Armed Forces Reserve Center (AFRC). Currently, there are no north-south streets north of Katella Avenue, between Walker Street and Bloomfield Street (about 1 1/2 miles). In a good system, an arterial would be provided every half-mile, so the need for the Denni Street connection (which lies within this 1 1/2 mile spacing) becomes apparent.

The Holder Street connection is even more critical, as it would serve to mitigate circulation impacts resulting from the location of the AFRC. The AFRC eliminates north-south connections between Katella Avenue and the I-405/S.R. 22 Freeways, which places a burden on the two adjacent arterials (Los Alamitos Boulevard and Valley View Street). Los Alamitos Boulevard is impacted to a lesser extent, due to the I-605 Freeway which is a parallel route and is located just west of this roadway.

The proposed Holder Street Bridge, therefore, completes a critical link which would provide a parallel route (alternative) to Valley View Street and Knott Avenue, both which must meet relatively high traffic demands. (It should be noted however that Holder Street between Cerritos Avenue and Ball Road falls outside the City's jurisdiction and is currently only two lanes, although the Master Plan of Arterial Highways designates Holder as a secondary roadway.) Provision of the bridge connection is anticipated to transfer some traffic from both Valley View Street and Knott Avenue. The redistribution of traffic is reflected in the daily and intersection analyses of the General Plan conditions. If the connections were not made it is estimated that 5,000-10,000 vehicles per day would be transferred to Valley View Street and Knott Avenue.

BUS SYSTEM

Figure C-3 in the Existing Circulation System section of the Element shows that the business park and retail along Katella Avenue and Valley View Avenue, respectively, have existing bus route services. As these areas develop in the future and efforts are increased to reduce dependance on the single occupancy vehicle, there will be an increased need for expanded bus service.

The business park area will need access to future rail service and bus service can serve as the crucial link. Expanded bus service can also provide alternative transportation to the residents of Cypress.

BICYCLE PATH SYSTEM

The bicycle path system has a number of circulation functions. Not only is biking the major means of local transportation for children under sixteen, but more people are considering biking for commuting to and from the workplace.

Generally, the bicycle path system within the City of Cypress is adequate. There are, however, a few areas in the City where bike paths do not yet extend. These areas, as proposed in the Circulation Plan, should be completed so that the City's

bicycle path system is all-inclusive of schools, community civic centers, service areas, parks, employment centers and regional bike paths.

LOS ALAMITOS ARMED FORCES RESERVE CENTER

In the strictest sense, Los Alamitos AFRC is not a major regional transportation facility because it does not directly service the City's civilian population, and is limited exclusively to military aircraft operations. The facility does serve as a major emergency evacuation point for the region, and as such should be regarded as a significant element in the City's overall transportation and circulation system.

In regards to other issues that surround flight operations in and out of the airport, the Noise Element treats noise related impacts, while the Land Use Element addresses issues related to building heights and land uses under the approach pattern.

CIRCULATION GOALS AND POLICIES

Circulation Element goals and policies define the City's vision for a balanced, efficient circulation system which incorporates many modes of travel and which allows for the safe movement of people and goods in and around Cypress. These goals recognize the constraints posed by the existing built environment, but also capitalize upon the opportunities created by established transportation routes. Through these goal statements, the City also lends it support to regional, long-range efforts to manage congestion and reduce pollutant emissions within the South Coast Air Basin.

BALANCED, FUNCTIONAL, AND EFFICIENT STREET SYSTEM

A transportation network must be well planned, functional, and properly maintained to allow street traffic to move efficiently over time. In addition to congestion relief, a well-designed system offers other benefits, such as cleaner air, time savings, and reduced motorist anxiety.

GOAL 1: Maintain a safe, efficient, economical, and aesthetically pleasing transportation system providing for the movement of people, goods, and services to serve the existing and future needs of the City of Cypress.

Policy 1.1: Respond to transportation problem areas with efforts to implement both interim and long term solutions.

Policy 1.2: Participate in transportation planning efforts which involve other governmental agencies, mandated programs, and regulations in order to minimize environmental impacts related to transportation.

Policy 1.3: Encourage developments which contribute to balanced land uses, which serves to reduce overall trip lengths (i.e. jobs/housing balance, locate retail in closer proximity to resident/patrons).

Policy 1.4: Require new developments to conform to the standards and criteria of the City of Cypress and other

mandated programs. This includes mitigation of traffic impacts to the surrounding street system.

Policy 1.5: The City of Cypress will continue involvement in plans and programs related to the Circulation Element. This involvement is anticipated to result in traffic studies to be undertaken by City staff, to identify specific circulation programs and improvements to be implemented, in order to satisfy the various related programs.

Subpolicy 1.5.1: Undertake a study to determine the necessary right-of-way needs for the Valley View Street/Ball Road and Valley View Street/Katella Avenue intersections.

Policy 1.6: Encourage the development of aesthetic streetscapes to promote a positive City image and provide visual relief.

Policy 1.7: Maintain consistency between the City Circulation Element and the Orange County Master Plan of Arterial Highways (MPAH).

ALTERNATIVE MODES OF TRANSPORTATION

As growth throughout Southern California adds vehicles to the overburdened freeways and roadways, people will rely more heavily on alternative modes of transportation, such as bus service, bicycles, and ridesharing. The following goal and policies intend to reduce vehicular travel by promoting alternative methods of transportation.

GOAL 2: To facilitate alternative modes of transportation, including public transportation, bicycles, ridesharing, and pedestrians, to support the land use plans and related transportation needs.

Policy 2.1: Encourage developments and improvements which incorporate innovative methods of accommodating transportation demands.

Policy 2.2: Give high priority to the establishment of a high-quality public transit system that minimizes dependency on the automobile.

Policy 2.3: Ensure that effective Transportation Demand Management (TDM) measures and programs are being implemented.

Policy 2.4: Encourage developments and improvements which facilitate implementation of high quality, desirable bicycle routes which meet or exceed established standards.

Policy 2.5: Implement adequate sidewalks to meet the required uses and needs, which serves to encourage alternative modes of transportation. Bicycle routes which utilize sidewalks require establishment of a City ordinance, per the Vehicle Code.

Policy 2.6: Respond to increases in demand for additional bus service through contact with OCTD and other available resources.

THE CIRCULATION PLAN

The "Circulation Issues" section in this Element identifies the long-term transportation and circulation concerns in Cypress. This section describes the strategies the City will pursue to address these issues and how a balanced transportation system that meets the future mobility needs of Cypress residents, as well as the business sector's demand to move goods most efficiently and effectively, will be created.

MASTER PLAN OF STREETS

The City's existing General Plan Arterial System is presented in Figure C-7.

Review of projected daily traffic volumes and evaluation of intersection capacities under General Plan buildout indicate the City's current Master Plan of Streets is adequate to accommodate future growth. While two segments along Walker slightly exceed the daily traffic volume capacity, volumes are not to the extent to justify an upgrade in roadway classification. The most notable issue related to the Master Plan of Streets is the requirement to upgrade Lincoln from its existing four lanes to the Master Plan six lanes, which is consistent with the County Master Plan of Arterial Highways.

The evaluation that the existing Master Plan can accommodate the proposed volumes is supported by the intersection analyses, which indicate that minimum LOS E operations can be provided at the Major Arterial Intersections, along Valley View Street, Lincoln Avenue and Katella Avenue. Three intersections (Moody/Lincoln, Walker/Lincoln and Knott/Katella) will require improvement to existing geometrics but not beyond Master Plan street widths. Two intersections (Valley View/Ball and Valley View/Katella) will require improvements beyond Master Plan street width to accommodate added lanes.

The lane geometrics needed to meet the LOS E standards are documented in the ICU worksheets. For informational purposes and to assist staff in their future studies, the

geometrics required to provide LOS D are included in Appendix A.

As the City's circulation system is anticipated to be operating at capacity conditions at certain key locations, it will be imperative to closely evaluate and monitor development as it occurs to determine its impacts on the surrounding street system. The specific types and sizes of future projects will influence the related traffic impacts. This indicates the need to balance land use decisions with the potential traffic impacts.

PUBLIC TRANSPORTATION PLAN

The proposed commuter rail systems within Orange County could have significant beneficial effect on traffic conditions in Cypress, given the substantial employment base along Katella Avenue. Benefits could be expanded by the five county Metrolink project, which would allow regionwide rail access. The actual location of the rail lines and accompanying stations will also greatly influence future bus routes.

Given the aggressive TDM goals projected for the business park uses, public transportation is anticipated to play a vital role. With regard to bus service, the City/developers will need to take an active role in pursuing added bus lines which will meet the demands. Development of the rail systems will also need to be monitored to determine how they can be best utilized to meet the TDM goals.

It would not be practical to identify specific added bus lines at this time, due to the many variables described above. Consideration of how to best utilize the existing and future bus and rail systems [i.e. through existing and future Transportation Management Associations (TMAs)] and continued involvement in these planning processes are required. These efforts could lead to programs which may include measures such as TMA sponsored bus service between nearby rail stations.

TRUCK ROUTE PLAN

The existing Truck Route Plan is recommended to be maintained for this updated Circulation Element. The current plan serves the needs of the City and no beneficial modifications are apparent at this time. This conclusion was confirmed based on conversations with the City Traffic Engineer. The recommended plan is shown in Figure C-5.

BICYCLE - SIDEWALK FACILITIES PLAN

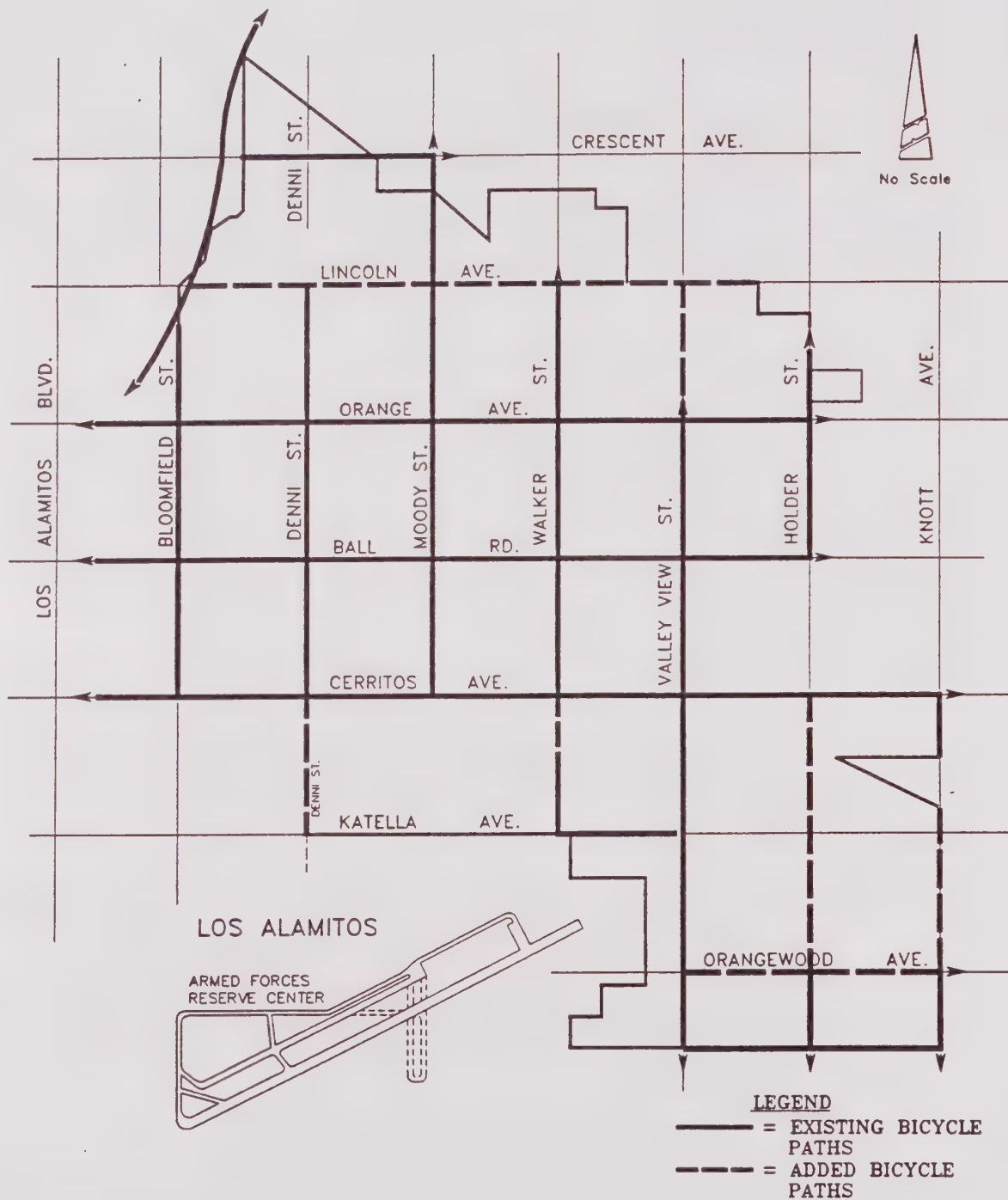
The proposed additions to the Bicycle - Sidewalk Facilities Plan are illustrated in Figure C-10. These additions will serve to facilitate increases in bicycle use as an alternative to the automobile. A goal should be to provide the highest quality of bicycle paths possible along these routes, given the individual needs.

An example is under existing conditions, there are locations where bicycle lanes and parking occur at the same location, but each use is allowed at different times of the day. This type of situation is allowable within CalTrans standards, but should be eliminated as Bicycle Circulation Element goals are met.

It also should be noted that some bicycle paths are currently designated on sidewalks, which is acceptable per the Vehicle Code, given that a City ordinance has been passed to allow this operation. Sufficient sidewalk width should be provided to serve both bicycles and pedestrians. The County of Orange assumes that a 10 foot sidewalk indicates a bicycle route on the sidewalk.

The "highest" quality will also depend on the projected user/use. For example, a sidewalk bicycle route would not be conducive to a route used primarily by commuters, but it may be the ideal route to serve elementary school children. Some form of review and process for upgrading bicycle routes will be essential to improving the bicycle route facilities.

Sidewalks should be provided along all arterials to promote walking as an alternative to vehicle transportation. As mentioned above, adequate sidewalk widths will be required,



SOURCE: Weston Pringle & Associates

if it is also planned to facilitate bicycles. If new development occurs where sidewalks are not provided, they should be included as a condition of the development, unless there are special circumstances.

The following specific recommendations regarding bicycle paths has been brought forth from the previous Plan to be included in this update.

1. Adequate design standards for bicycle trails should be established including the following:

○ Grade:

- Maximum grade of bikeways (short distance) -- 6 percent.
- Maximum grade of bikeways (long distance) -- 3 percent.
- Resting places -- level.

○ Traffic Direction:

Two-way traffic facilities should be provided for Class I bikeways only. Trail systems on roads should be in the same direction as other vehicular traffic.

○ Width:

Minimum:

- | | |
|------------------------------|----|
| - Bikeway, one-way | 5' |
| - Bikeway, two-way | 8' |
| - Bicycle lane, one-way only | 5' |

○ Surface:

Concrete or asphalt

○ Safety:

- Priority for separation of bicycles and other vehicular traffic.
- Adequate signing.
- Use of striping as a minimum separation of bicycle and automobile traffic.
- Continue bicycle safety education programs.

○ Accessibility:

- Provision for easy access to and from points of destination and/or interest.
- Bikeways should lead to focal points in the community.

- **Trail Attraction and Aesthetics:**
 - Location of trail system along routes of visual and functional interest.
 - Design of facilities adjacent to trail should be compatible.
 - Trails should be physically attractive in terms of comfort, rideability, and safety.
- 2. **Where a situation is not covered by the above criteria and standards, or by current City standards, the City should utilize the bikeway design criteria established by the State Department of Transportation.**
- 3. **The City should continue to enforce provisions of its Subdivision Ordinance, requiring the dedication of land for bicycle trails.**

TABLE 1
DAILY VOLUME ANALYSES
STREET SEGMENTS

CITY OF CYPRESS
GENERAL PLAN

STREET SEGMENT	EXISTING		NET INCREASE GENERAL PLAN VOLUMES	TOTAL G.P. BUILDOUT	
	VOLUME	CAPACITY		VOLUME	GENERAL PLAN ARTERIAL CAPACITY CURRENT
Lincoln Avenue:					
-Bloomfield to Denni	23.6	33.8	7.4	31.0	50.6
-Denni to Moody	22.7	33.8	10.3	33.0	50.6
-Moody to Walker	25.0	33.8	10.2	35.2	50.6
-Walker to Valley View	23.0	33.8	10.0	33.0	50.6
Orange Avenue:					
-Bloomfield to Denni	8.5	22.5	2.5	11.0	22.5
-Denni to Moody	9.6	22.5	2.9	12.5	22.5
-Moody to Walker	12.4	22.5	2.8	15.2	22.5
-Walker to Valley View	15.1	22.5	1.8	16.9	22.5
-Valley View to Holder	13.7	22.5	0.9	14.6	22.5

CIRCULATION ELEMENT
FEBRUARY, 1993

TABLE 1 (cont.)
DAILY VOLUME ANALYSES
STREET SEGMENTS

CITY OF CYPRESS
GENERAL PLAN

STREET SEGMENT	EXISTING		NET INCREASE GENERAL PLAN VOLUMES	TOTAL G.P. BUILDOUT	
	<u>VOLUME</u>	<u>CAPACITY</u>		<u>VOLUME</u>	<u>GENERAL PLAN ARTERIAL CAPACITY CURRENT</u>
<u>Ball Road:</u>					
-Bloomfield to Denni	20.0	33.8	0.5	20.5	33.8
-Denni to Moody	15.2	33.8	0.5	15.7	33.8
-Moody to Walker	17.4	33.8	0.6	18.0	33.8
-Walker to Valley View	21.2	33.8	1.0	22.2	33.8
-Valley View to Holder	19.3	33.8	0.5	19.8	33.8
<u>Cerritos Avenue:</u>					
-Denni to Moody	24.1	33.8	6.8	30.9	33.8
-Moody to Walker	26.9	33.8	10.3	37.2	33.8
-Walker to Valley View	20.9	33.8	3.9	24.8	33.8
-Valley View to Holder	17.6	33.8	2.0	19.6	33.8

CIRCULATION ELEMENT
FEBRUARY, 1993

TABLE 1 (cont.)

DAILY VOLUME ANALYSES

STREET SEGMENTS

CITY OF CYPRUS
GENERAL PLAN

STREET SEGMENT	EXISTING		NET INCREASE GENERAL PLAN VOLUMES	TOTAL G.P. BUILDOUT	
	<u>VOLUME</u>	<u>CAPACITY</u>		<u>VOLUME</u>	<u>GENERAL PLAN ARTERIAL CAPACITY CURRENT</u>
<u>Katella Avenue:</u>					
-West of Walker	39.6	50.6	8.5	48.1	50.6
-Walker to Valley View	31.2	50.6	14.8	46.0	50.6
-Valley View to Holder	28.4	50.6	6.7	35.1	50.6
-Holder to Knott	28.5	50.6	5.2	33.7	50.6
<u>Orangewood Avenue:</u>					
-Valley View to Holder	12.5	22.5	-----	12.5	22.5
-Holder to Knott	8.9	22.5	-----	8.9	22.5
<u>Bloomfield Street:</u>					
-Lincoln to Orange	13.8	22.5	3.0	16.8	22.5
-Orange to Ball	10.4	22.5	3.6	14.0	22.5
-Ball to Cerritos	13.6	33.8	3.6	17.2	22.5

CIRCULATION ELEMENT
FEBRUARY, 1993

TABLE 1 (cont.)

DAILY VOLUME ANALYSES

STREET SEGMENTS

CITY OF CYPRSS
GENERAL PLAN

STREET SEGMENT	EXISTING		NET INCREASE GENERAL PLAN VOLUMES	TOTAL G.P. BUILDOUT	
	VOLUME	CAPACITY		VOLUME	GENERAL PLAN ARTERIAL CAPACITY CURRENT
Denni Street:					
-Lincoln to Orange	6.1	22.5	3.6	9.7	22.5
-Orange to Ball	7.3	22.5	4.3	11.6	22.5
-Ball to Cerritos	8.0	22.5	3.8	11.8	22.5
-Cerritos to Katella	-----	-----	-----	-----	22.5
Moody Street:					
-North of Lincoln	18.4	22.5	6.0	24.4	33.8
-Lincoln to Orange	16.4	22.5	5.7	22.1	33.8
-Orange to Ball	14.9	22.5	5.8	20.7	33.8
-Ball to Cerritos	10.2	33.8	5.5	15.7	33.8

CIRCULATION ELEMENT
FEBRUARY, 1993

TABLE 1 (cont.)

DAILY VOLUME ANALYSES

STREET SEGMENTS

CITY OF CYPRUS
GENERAL PLAN

STREET SEGMENT	EXISTING		NET INCREASE GENERAL PLAN VOLUMES	TOTAL G.P. BUILDOUT	
	<u>VOLUME</u>	<u>CAPACITY</u>		<u>VOLUME</u>	<u>GENERAL PLAN ARTERIAL CAPACITY CURRENT</u>
<u>Walker Street:</u>					
-North of Lincoln	20.0	22.5	2.6	22.6	22.5
-Lincoln to Orange	16.4	22.5	3.6	20.0	22.5
-Orange to Ball	15.5	22.5	5.6	21.1	22.5
-Ball to Cerritos	12.0	33.8	5.5	17.5	22.5
-Cerritos to Katella	15.9	33.8	12.3	28.2	22.5
<u>Valley View Street:</u>					
-Lincoln to Orange	39.3 (35.4)	50.6	5.6	41.0	50.6
-Orange to Ball	36.6 (33.2)	50.6	6.2	39.4	50.6
-Ball to Cerritos	35.7 (31.8)	50.6	6.5	38.3	50.6
-Cerritos to Katella	37.9 (32.5)	50.6	8.5	41.0	50.6
-Katella to Orangewood	48.7 (41.4)	50.6	10.9	52.3	50.6
-South of Orangewood	44.6 (37.3)	50.6	6.2	43.5	50.6

CIRCULATION ELEMENT
FEBRUARY, 1993

TABLE 1 (cont.)

DAILY VOLUME ANALYSES

STREET SEGMENTS

CITY OF CYPRESS
GENERAL PLAN

STREET SEGMENT	EXISTING		NET INCREASE GENERAL PLAN VOLUMES	TOTAL G.P. BUILDOUT	
	<u>VOLUME</u>	<u>CAPACITY</u>		<u>VOLUME</u>	<u>GENERAL PLAN ARTERIAL CAPACITY CURRENT</u>
<u>Holder Street:</u>					
-Lincoln to Orange	12.0 (17.4)	22.5	0.3	17.7	22.5
-Orange to Ball	9.6 (14.5)	22.5	0.3	14.8	22.5
-Cerritos to Katella	5.4 (13.0)	22.5	-0.2	12.8	22.5
-Katella to Orangewood	3.0 (12.7)	22.5	-0.3	12.4	22.5
-South of Orangewood	8.8 (18.5)	22.5	-0.2	18.3	22.5
<u>Knott Avenue:</u>					
-Cerritos to Katella	31.0 (28.8)	33.8	-1.0	27.8	33.8
-Katella to Orangewood	34.0 (31.6)	33.8	0.7	32.3	33.8
-South of Orangewood	31.6 (29.2)	33.8	0.7	29.9	33.8

CIRCULATION ELEMENT
FEBRUARY, 1993

(29.2) = Adjusted volumes based on the implementation of the Holder Bridge.

TABLE 2
TRIP GENERATION RATES
Cypress General Plan Update

<u>LAND USE</u>	<u>DESCRIPTOR</u>	<u>DAILY</u>	<u>TRIP ENDS PER DESCRIPTOR</u>			
			<u>AM PEAK HOUR</u>		<u>PM PEAK HOUR</u>	
			<u>IN</u>	<u>OUT</u>	<u>IN</u>	<u>OUT</u>
Low Residential	Dwelling Unit	10	0.2	0.6	0.7	0.3
Med. Residential	Dwelling Unit	8	0.1	0.5	0.6	0.2
High Residential	Dwelling Unit	6	0.1	0.4	0.5	0.2
Mobile Home	Dwelling Unit	4.81	0.08	0.32	0.35	0.21
Light Industrial	Square Feet	6.97	0.76	0.16	0.12	0.86
Business Park	Square Feet	14.37	1.38	0.24	0.33	1.15
Golf Course	Acre	8.33	0.22	0.05	0.08	0.31
Commercial	Square Feet	38.65	0.53	0.31	1.83	1.83

SOURCE: Trip Generation, Fifth Edition; Institute of Transportation Engineers (ITE); January, 1991. For the Residential uses rates were developed by WP&A based on Trip Generation and Traffic Generators published by the San Diego Association of Governments and various other studies.

TABLE 3
TRIP GENERATION
Cypress General Plan Update

ZONE	LAND USE	SIZE	DAILY	TRIP ENDS			
				AM PEAK HOUR IN	AM PEAK HOUR OUT	PM PEAK HOUR IN	PM PEAK HOUR OUT
1	Low Residential	(105) DU	-1,000	-20	-65	-75	-30
	Medium Residential	(17) DU	-150	-5	-10	-10	-5
	High Residential	24 DU	150	5	10	15	5
	Commercial	1,797 SF	70	NEG	NEG	5	5
	High Res.-Lincoln	3 DU	<u>20</u>	<u>NEG</u>	<u>NEG</u>	<u>NEG</u>	<u>NEG</u>
	TOTAL		-900	-20	-65	-65	-25
2	Low Residential	(112) DU	-1,100	-25	-70	-80	-35
	Medium Residential	(156) DU	-1,300	-15	-80	-95	-30
	High Residential	582 DU	3,500	60	235	290	115
	Mobile Home	3 DU	15	NEG	NEG	NEG	NEG
	High Res.-Lincoln	49 DU	300	5	20	25	10
	Commercial	52,783 SF	<u>2,000</u>	<u>30</u>	<u>15</u>	<u>95</u>	<u>95</u>
	Subtotal		3,400	55	120	235	155
	Reduction of 25%		<u>900</u>	<u>15</u>	<u>30</u>	<u>60</u>	<u>40</u>
	TOTAL		2,500	40	90	175	115

(105) = Represents reduction in this type of development, based on a comparison of existing development to the Land Use Element of the General Plan.

TABLE 3 (cont.)
TRIP GENERATION
Cypress General Plan Update

<u>ZONE</u>	<u>LAND USE</u>	<u>SIZE</u>	<u>DAILY</u>	<u>TRIP ENDS</u>			
				<u>AM PEAK HOUR</u>	<u>PM PEAK HOUR</u>	<u>IN</u>	<u>OUT</u>
				<u>IN</u>	<u>OUT</u>		
3	Low Residential	(41) DU	-500	-10	-25	-30	-15
	High Residential	14 DU	100	NEG	5	10	5
	Light Industrial	95,832 SF	700	70	15	10	80
	High Res.-Lincoln	124 DU	700	15	50	60	25
	Commercial	149,857 SF	<u>5,800</u>	<u>80</u>	<u>45</u>	<u>275</u>	<u>275</u>
	Subtotal		6,800	155	90	325	370
	Reduction of 25%		<u>1,700</u>	<u>40</u>	<u>25</u>	<u>80</u>	<u>95</u>
	TOTAL		5,100	115	65	245	275
4	Low Residential	(207) DU	-2,100	-40	-125	-145	-60
	Medium Residential	485 DU	3,900	50	240	290	100
	High Residential	(25) DU	<u>-150</u>	<u>-5</u>	<u>-10</u>	<u>-15</u>	<u>-5</u>
	TOTAL		1,700	5	105	130	35

TABLE 3 (cont.)
TRIP GENERATION
Cypress General Plan Update

ZONE	LAND USE	SIZE	DAILY	TRIP ENDS			
				AM PEAK HOUR IN	AM PEAK HOUR OUT	PM PEAK HOUR IN	PM PEAK HOUR OUT
5	Low Residential	(106) DU	-1,100	-20	-65	-75	-30
	Medium Residential	248 DU	1,200	25	125	150	50
	High Residential	(4) DU	-25	NEG	NEG	NEG	NEG
	High Res.-Lincoln	49 DU	300	5	20	25	10
	Commercial	6,557 SF	<u>300</u>	<u>5</u>	<u>NEG</u>	<u>10</u>	<u>10</u>
	Subtotal		675	15	80	110	40
	Reduction of 25%		<u>170</u>	<u>5</u>	<u>20</u>	<u>30</u>	<u>10</u>
	TOTAL		500	10	60	80	30
6	Low Residential	(58) DU	-600	-10	-35	-40	-20
	High Residential	(19) DU	-100	NEG	-10	-10	-5
	Mobile Home	12 DU	100	NEG	5	5	NEG
	High Res.-Lincoln	120 DU	700	15	50	60	25
	Commercial	195,792 SF	<u>7,600</u>	<u>105</u>	<u>60</u>	<u>360</u>	<u>360</u>
	Subtotal		7,700	110	70	375	360
	Reduction of 25%		<u>1,900</u>	<u>30</u>	<u>20</u>	<u>95</u>	<u>90</u>
	TOTAL		5,800	80	50	280	270

CITY OF CYPRESS
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TABLE 3 (cont.)

TRIP GENERATION

Cypress General Plan Update

<u>ZONE</u>	<u>LAND USE</u>	<u>SIZE</u>	<u>DAILY</u>	<u>TRIP ENDS</u>			
				<u>AM PEAK HOUR</u> <u>IN</u>	<u>AM PEAK HOUR</u> <u>OUT</u>	<u>PM PEAK HOUR</u> <u>IN</u>	<u>PM PEAK HOUR</u> <u>OUT</u>
7	Low Residential	(160) DU	-1,600	-30	-95	-115	-50
	Medium Residential	(84) DU	-700	-10	-40	-50	-20
	High Residential	131 DU	800	15	50	65	25
	Light Industrial	146,362 SF	1,000	110	25	20	125
	High Res.-Lincoln	150 DU	900	15	60	75	30
	Commercial	213,063 SF	<u>8,200</u>	<u>115</u>	<u>70</u>	<u>390</u>	<u>390</u>
	Subtotal		8,600	215	70	385	500
	Reduction of 25%		<u>2,200</u>	<u>55</u>	<u>20</u>	<u>95</u>	<u>125</u>
	TOTAL		6,400	160	50	290	375
8	Low Residential	(134) DU	-1,300	-30	-80	-95	-40
	Medium Residential	(253) DU	-2,000	-25	-125	-150	-50
	High Residential	473 DU	2,800	50	190	235	95
	High Res.-Lincoln	112 DU	700	10	45	55	25
	Commercial	268,853 SF	<u>10,400</u>	<u>140</u>	<u>85</u>	<u>490</u>	<u>490</u>
	Subtotal		10,600	145	115	535	520
	Reduction of 25%		<u>2,700</u>	<u>35</u>	<u>30</u>	<u>135</u>	<u>130</u>
	TOTAL		7,900	110	85	400	390

TABLE 3 (cont.)
TRIP GENERATION
Cypress General Plan Update

<u>ZONE</u>	<u>LAND USE</u>	<u>SIZE</u>	<u>DAILY</u>	<u>TRIP ENDS</u>			
				<u>AM PEAK HOUR</u>	<u>PM PEAK HOUR</u>	<u>IN</u>	<u>OUT</u>
				<u>IN</u>	<u>OUT</u>		
9	Low Residential	(199) DU	-2,000	-40	-120	-140	-60
	Medium Residential	290 DU	2,300	30	145	175	60
	High Residential	(43) DU	-300	-5	-20	-20	-10
	High Res.-Lincoln	31 DU	200	5	15	15	5
	Commercial	29,610 SF	<u>1,200</u>	<u>15</u>	<u>10</u>	<u>55</u>	<u>55</u>
	TOTAL		1,400	5	30	85	50
10	Light Industrial	(123,710) SF	-900	-95	-20	-15	-105
	High Res.-Lincoln	136 DU	800	15	55	70	30
	Commercial	98,359 SF	<u>3,800</u>	<u>55</u>	<u>30</u>	<u>180</u>	<u>180</u>
	Subtotal		3,700	-25	50	175	80
	Reduction of 25%		<u>4,400</u>	<u>40</u>	<u>45</u>	<u>220</u>	<u>190</u>
	TOTAL		13,000	120	130	665	565

TABLE 3 (cont.)
TRIP GENERATION
Cypress General Plan Update

<u>ZONE</u>	<u>LAND USE</u>	<u>SIZE</u>	<u>DAILY</u>	<u>TRIP ENDS</u>			
				<u>AM PEAK HOUR</u>		<u>PM PEAK HOUR</u>	
				<u>IN</u>	<u>OUT</u>	<u>IN</u>	<u>OUT</u>
11	Low Residential	(27) DU	-200	-5	-15	-20	-10
	Medium Residential	(68) DU	-500	-10	-35	-40	-15
	High Residential	114 DU	700	10	45	60	25
	Light Industrial	43,560 SF	300	35	10	5	40
	High Res.-Lincoln	106 DU	600	10	40	55	20
	Commercial	103,564 SF	<u>4,000</u>	<u>55</u>	<u>35</u>	<u>190</u>	<u>190</u>
	Subtotal		<u>4,900</u>	<u>95</u>	<u>80</u>	<u>250</u>	<u>250</u>
	Reduction of 25%		<u>1,200</u>	<u>25</u>	<u>20</u>	<u>65</u>	<u>65</u>
	TOTAL		<u>3,700</u>	<u>70</u>	<u>60</u>	<u>185</u>	<u>185</u>
12	Low Residential	(54) DU	-500	-10	-30	-40	-20
	Medium Residential	(24) DU	-200	-5	-15	-15	-5
	High Residential	198 DU	1,200	20	80	100	40
	Commercial	6,969 SF	<u>300</u>	<u>5</u>	<u>5</u>	<u>15</u>	<u>15</u>
	TOTAL		<u>800</u>	<u>10</u>	<u>40</u>	<u>60</u>	<u>30</u>

TABLE 3 (cont.)
TRIP GENERATION
Cypress General Plan Update

<u>ZONE</u>	<u>LAND USE</u>	<u>SIZE</u>	<u>DAILY</u>	<u>TRIP ENDS</u>			
				<u>AM PEAK HOUR</u>	<u>PM PEAK HOUR</u>	<u>IN</u>	<u>OUT</u>
				<u>IN</u>	<u>OUT</u>		
13	Low Residential	(79) DU	-800	-15	-50	-55	-25
	Medium Residential	118 DU	900	10	60	70	25
	High Residential	3 DU	<u>20</u>	<u>NEG</u>	<u>NEG</u>	<u>NEG</u>	<u>NEG</u>
	TOTAL		100	-5	10	15	0
14	Low Residential	(199) DU	-2,000	-40	-120	-140	-60
15	Low Residential	(99) DU	-1,000	-20	-60	-70	-30
	Light Industrial	34,848 SF	200	25	5	5	30
	Commercial	40,075 SF	<u>1,500</u>	<u>20</u>	<u>15</u>	<u>75</u>	<u>75</u>
	TOTAL		700	25	-40	10	75

TABLE 3 (cont.)
TRIP GENERATION
Cypress General Plan Update

<u>ZONE</u>	<u>LAND USE</u>	<u>SIZE</u>	<u>DAILY</u>	<u>TRIP ENDS</u>			
				<u>AM PEAK HOUR</u> <u>IN</u>	<u>AM PEAK HOUR</u> <u>OUT</u>	<u>PM PEAK HOUR</u> <u>IN</u>	<u>PM PEAK HOUR</u> <u>OUT</u>
16	Low Residential	(44) DU	-400	-10	-25	-30	-15
	Medium Residential	(54) DU	-400	-5	-30	-30	-10
	High Residential	612 DU	3,700	60	245	310	125
	Commercial	(3,485) SF	<u>-100</u>	<u>NEG</u>	<u>NEG</u>	<u>-5</u>	<u>-5</u>
	TOTAL		2,800	45	190	245	95
17A	Low Residential	(129) DU	-1,300	-25	-80	-90	-40
	Medium Residential	(21) DU	-200	-5	-10	-15	-5
	High Residential	(210) DU	-1,300	-20	-85	-105	-40
	Commercial	(1,742) SF	<u>-100</u>	<u>NEG</u>	<u>NEG</u>	<u>-5</u>	<u>-5</u>
	TOTAL		-2,900	-50	-175	-215	-90
17B	Commercial	38,333 SF	1,500	20	10	70	70
18	Medium Residential	111 DU	900	10	55	65	25
	High Residential	(192) DU	<u>-1,200</u>	<u>-20</u>	<u>-75</u>	<u>-95</u>	<u>-40</u>
	TOTAL		-300	-10	-20	-30	-15

TABLE 3 (cont.)

TRIP GENERATION
Cypress General Plan Update

<u>ZONE</u>	<u>LAND USE</u>	<u>SIZE</u>	<u>DAILY</u>	<u>TRIP ENDS</u>			
				<u>AM PEAK HOUR</u>		<u>PM PEAK HOUR</u>	
				<u>IN</u>	<u>OUT</u>	<u>IN</u>	<u>OUT</u>
19	Low Residential	(5) DU	-50	NEG	-5	-5	NEG
	Medium Residential	54 DU	<u>400</u>	<u>5</u>	<u>30</u>	<u>35</u>	<u>10</u>
	TOTAL		400	5	25	30	10
20	Low Residential	(31) DU	-300	-5	-20	-20	-10
	Commercial	1,743 SF	<u>100</u>	<u>NEG</u>	<u>NEG</u>	<u>5</u>	<u>5</u>
	TOTAL		-200	-5	-20	-15	-5
21	Low Residential	(9) DU	-100	NEG	-5	-5	NEG
22	Low Residential	(152) DU	-1,500	-30	-90	-105	-45
	Medium Residential	7 DU	100	NEG	5	5	NEG
	Commercial	(15,682) SF	<u>-600</u>	<u>-10</u>	<u>-5</u>	<u>-30</u>	<u>-30</u>
	TOTAL		-2,000	-40	-90	-130	-75

TABLE 3 (cont.)
TRIP GENERATION
Cypress General Plan Update

<u>ZONE</u>	<u>LAND USE</u>	<u>SIZE</u>	<u>DAILY</u>	<u>TRIP ENDS</u>			
				<u>AM PEAK HOUR</u>	<u>PM PEAK HOUR</u>	<u>IN</u>	<u>OUT</u>
				<u>IN</u>	<u>OUT</u>		
23	Low Residential	(109) DU	-1,100	-20	-65	-75	-35
	Commercial	(1,742) SF	<u>-100</u>	<u>NEG</u>	<u>NEG</u>	<u>-5</u>	<u>-5</u>
	TOTAL		-1,200	-20	-65	-80	-40
24	Low Residential	(114) DU	-1,100	-25	-70	-80	-35
	Commercial	1,742 SF	<u>100</u>	<u>NEG</u>	<u>NEG</u>	<u>5</u>	<u>5</u>
	TOTAL		-1,000	-25	-70	-75	-30
25	Business Park	865,754 SF	12,400	1,195	210	285	995
	Golf Course	(23.8) AC	<u>-200</u>	<u>-5</u>	<u>NEG</u>	<u>NEG</u>	<u>-10</u>
	Subtotal		12,200	1,190	210	285	985
	TDM Reduction of 35%		<u>4,300</u>	<u>415</u>	<u>75</u>	<u>100</u>	<u>345</u>
	TOTAL		7,900	775	135	185	640

TABLE 3 (cont.)
TRIP GENERATION
Cypress General Plan Update

<u>ZONE</u>	<u>LAND USE</u>	<u>SIZE</u>	<u>DAILY</u>	<u>TRIP ENDS</u>			
				<u>AM PEAK HOUR</u>	<u>PM PEAK HOUR</u>	<u>IN</u>	<u>OUT</u>
				<u>IN</u>	<u>OUT</u>		
26	Business Park	1,289,710 SF	18,500	1,780	310	425	1,485
	Commercial	(221,285) SF	<u>-8,500</u>	<u>-115</u>	<u>-70</u>	<u>-405</u>	<u>-405</u>
	TOTAL		10,000	1,665	240	20	1,080
27	Low Residential	3 DU	100	NEG	NEG	NEG	NEG
	Business Park	(107,704) SF	<u>-1,500</u>	<u>-150</u>	<u>-25</u>	<u>-35</u>	<u>-125</u>
	TOTAL		-1,400	-150	-25	-35	-125
28	Low Residential	(117) DU	-1,200	-25	-70	-80	-35
	Business Park	(-37,026) SF	-500	-50	-10	-15	-40
	Commercial	(69,696) SF	<u>-2,700</u>	<u>-35</u>	<u>-20</u>	<u>-130</u>	<u>-130</u>
	TOTAL		-4,400	-110	-100	-225	-205

TABLE 3 (cont.)
TRIP GENERATION
Cypress General Plan Update

<u>ZONE</u>	<u>LAND USE</u>	<u>SIZE</u>	<u>DAILY</u>	<u>TRIP ENDS</u>			
				<u>AM PEAK HOUR</u>	<u>PM PEAK HOUR</u>	<u>IN</u>	<u>OUT</u>
				<u>IN</u>	<u>OUT</u>		
29	Business Park	962,000 SF	13,800	1,330	230	320	1,105
	Commercial	69,696 SF	<u>2,700</u>	<u>35</u>	<u>20</u>	<u>130</u>	<u>130</u>
	Subtotal		16,500	1,365	250	450	1,235
	TDM Reduction of 35%		<u>5,800</u>	<u>480</u>	<u>90</u>	<u>160</u>	<u>435</u>
	TOTAL		10,700	885	160	290	800
30	Business Park	801,910 SF	11,500	1,110	195	265	925
	Commercial	(169,013) SF	<u>-6,500</u>	<u>-90</u>	<u>-50</u>	<u>-310</u>	<u>-310</u>
	Subtotal		5,000	1,020	145	-45	615
	TDM Reduction of 35%		<u>1,800</u>	<u>360</u>	<u>50</u>	<u>0</u>	<u>215</u>
	TOTAL		3,200	660	95	-45	400
31	Business Park	(136,988) SF	-2,000	-190	-35	-45	-160
	TOTAL		-2,000	-190	-35	-45	-160

TABLE 3 (cont.)

TRIP GENERATION

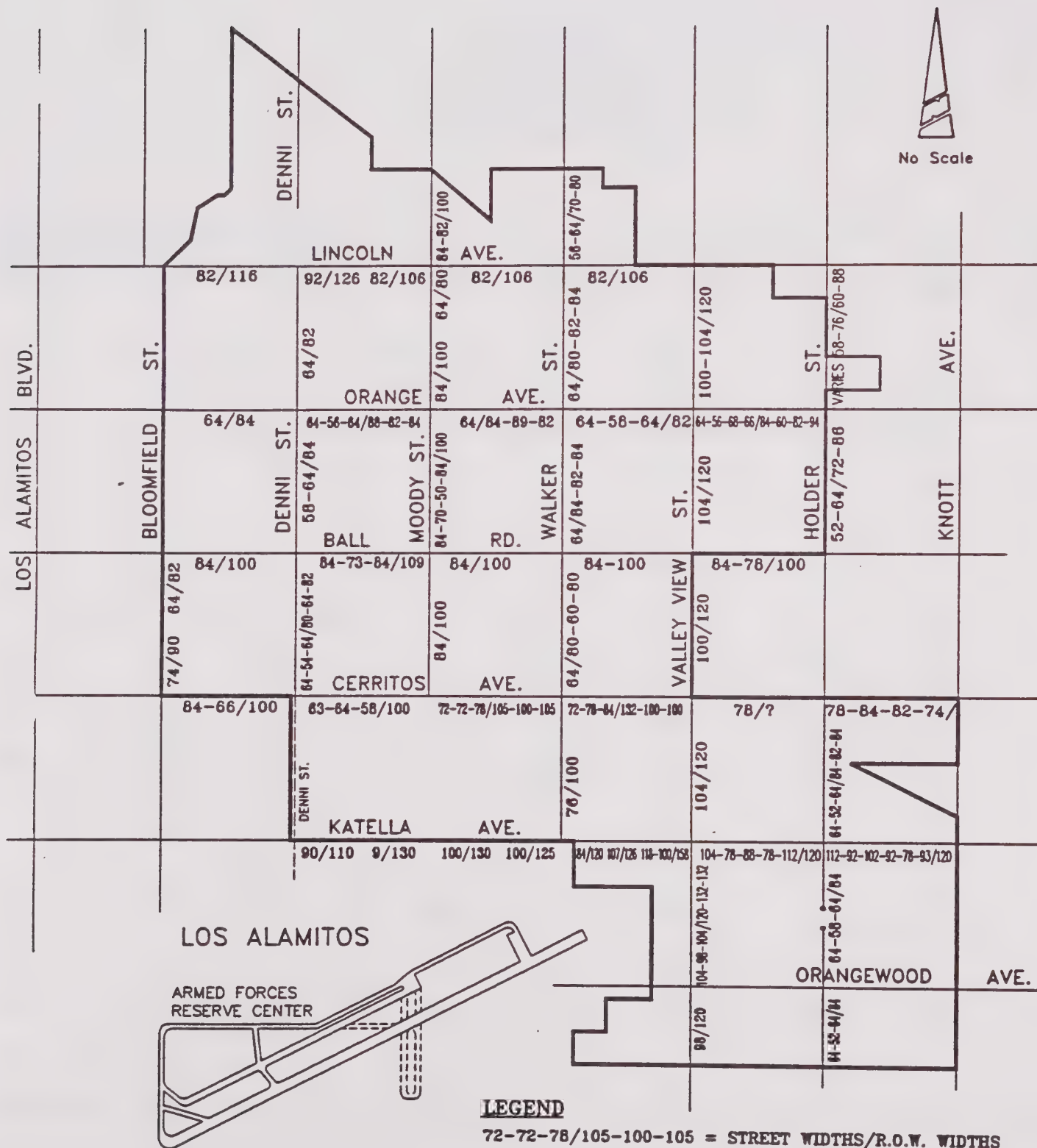
Cypress General Plan Update

<u>ZONE</u>	<u>LAND USE</u>	<u>SIZE</u>	<u>DAILY</u>	<u>TRIP ENDS</u>			
				<u>AM PEAK HOUR</u>	<u>PM PEAK HOUR</u>	<u>IN</u>	<u>OUT</u>
				<u>IN</u>	<u>OUT</u>		
32	Business Park	25,179 SF	400	35	10	10	30
	Commercial	(243,936) SF	<u>-9,400</u>	<u>-130</u>	<u>-75</u>	<u>-445</u>	<u>-445</u>
	TOTAL		-9,000	-95	-65	-435	-415
33	Business Park	1,904,289 SF	27,400	2,630	460	630	2,190
	TDM Reduction of 35%		<u>9,600</u>	<u>920</u>	<u>160</u>	<u>220</u>	<u>765</u>
	TOTAL		17,800	1,710	300	410	1,425
34	Business Park	541,112 SF	7,800	745	130	180	625
	TDM Reduction of 35%		<u>2,700</u>	<u>260</u>	<u>45</u>	<u>65</u>	<u>220</u>
	TOTAL		5,100	485	85	115	405
35	Business Park	(261,036) SF	-3,700	-360	-65	-85	-300
	TOTAL		-3,700	-360	-65	-85	-300

TABLE 3 (cont.)
TRIP GENERATION
Cypress General Plan Update

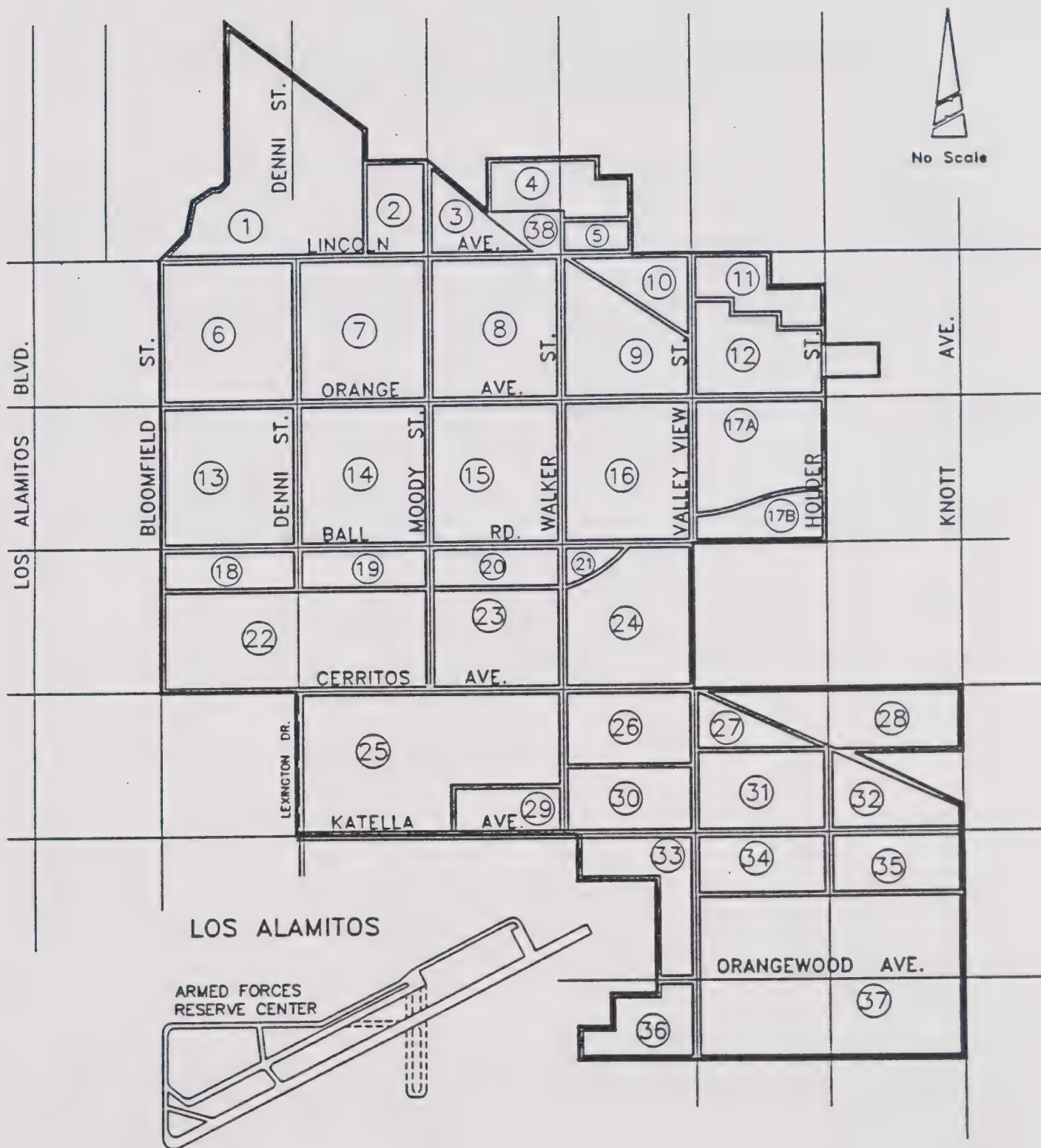
<u>ZONE</u>	<u>LAND USE</u>	<u>SIZE</u>	<u>DAILY</u>	<u>TRIP ENDS</u>			
				<u>AM PEAK HOUR</u>	<u>PM PEAK HOUR</u>	<u>IN</u>	<u>OUT</u>
36	Low Residential	(60) DU	-600	-15	-35	-40	-20
	Golf Course	0.2 AC	NEG	NEG	NEG	NEG	NEG
	Commercial	(1,742) SF	<u>-100</u>	<u>NEG</u>	<u>NEG</u>	<u>-5</u>	<u>-5</u>
	TOTAL		-700	-15	-35	-45	-25
37	Low Residential	(268) DU	-2,700	-55	-160	-190	-80
	Medium Residential	154 DU	<u>1,200</u>	<u>15</u>	<u>80</u>	<u>90</u>	<u>30</u>
	TOTAL		-1,500	-40	-80	-100	-50
38	Low Residential	(9) DU	-100	NEG	-5	-5	NEG
	Medium Residential	(23) DU	-200	NEG	-10	-15	-5
	High Residential	60 DU	<u>400</u>	<u>5</u>	<u>25</u>	<u>30</u>	<u>15</u>
	TOTAL		100	5	10	10	10

(105) = Represents reduction in this type of development, based on a comparison of existing development to the Land Use Element of the General Plan.



WESTON PRINGLE & ASSOCIATES

FIGURE 1



TRAFFIC ANALYSIS ZONES

WESTON PRINGLE & ASSOCIATES

FIGURE 2

CITY OF CYPRESS
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FEBRUARY, 1993

APPENDIX A

EXPLANATION OF INTERSECTION CAPACITY UTILIZATION

The capacity of a street is nearly always greater between intersection and less at intersections. The reason for this is that the traffic flows continuously between intersections and only part of the time at intersections. To study intersection capacity, a technique known as Intersection Capacity Utilization (ICU) has been developed. ICU analysis consists of (a) determining the proportion of signal time needed to serve each conflicting movement; (b) summing the times for the movements; and (c) comparing the total time required to the time available. For example, if for north-south traffic the northbound traffic is 1,000 vehicles per hour, the southbound traffic is 800 vehicles per hour, and the capacity of either approach is 2,000 vehicles per hour of green, then the northbound traffic is critical and requires $1,000/2,000$ or 50 percent of the signal time. If for the east-west traffic, 40 percent of the signal time is required, then it can be seen that the ICU is 50 plus 40, or 90 percent. When left-turn phases exist, they are incorporated into the analysis. As ICU's approach 100 percent, the quality of traffic service approaches Level of Service (LOS) E, as defined in the Highway Capacity Manual, Special Report 87, Highway Research Board, 1965.

Level of Service is used to describe quality of traffic flow. Levels of Service A to C operate quite well. Level of Service D is typically the Level of Service for which an urban street is designed. Level of Service E is the maximum volume a facility can accommodate and will result in possible stoppages of momentary duration. Level of Service F occurs when a facility is overloaded and is characterized by stop-and-go traffic with stoppages of long duration. A description of the various levels of service appears on the following page.

The ICU calculations assume that an intersection is signalized and that the signal is ideally timed. Although calculating ICU for an unsignalized intersection is not valid, the presumption is that a signal can be installed and the calculation shows whether the geometrics are capable of accommodating the expected volumes. It is possible to have an ICU well below 1.0, yet have severe traffic congestion. This would occur because one or more movements is not getting enough time to satisfy its demand with excess time existing on other moves.

Capacity is often defined in terms of roadway width. However, standard lanes have approximately the same capacity whether they are 11 foot or 14 foot lanes. Our data indicates a typical lane, whether a through lane or left-turn lane has a capacity of approximately 1600 vehicles per lane per hour of green time. The 1985 Highway Capacity Manual found capacities of 1800 vehicles per lane per hour of green time; however the 1600 value has been widely utilized and results in a conservative analysis.

APPENDIX A

LEVEL OF SERVICE DESCRIPTIONS

<u>LEVEL OF SERVICE</u>		<u>NOMINAL RANGE OF ICU (a)</u>
A	Low volumes; high speeds; speed not restricted by other vehicles; all signal cycles clear with no vehicles; all signal cycles clear with no vehicles waiting through more than one signal cycle.	0.00 - 0.60
B	Operating speeds beginning to be affected by other traffic; between one and ten percent of the signal cycles have one or more vehicles which wait through more than one signal cycle during peak traffic periods.	0.61 - 0.70
C	Operating speeds and maneuverability closely controlled by other traffic; between 11 and 30 percent of the signal cycles have one or more vehicles which wait through more than one signal cycle during peak traffic periods; recommended ideal design standard.	0.71 - 0.80
D	Tolerable operating speeds; 31 to 70 percent of the signal cycles have one or more vehicles which wait through more than one signal cycle during traffic periods; often used as design standard in urban areas.	0.81 - 0.90
E	Capacity; the maximum traffic volumes an intersection can accommodate restricted speeds; 71 to 100 percent of the signal cycles have one or more vehicle which wait through more than one signal cycle during peak traffic periods.	0.91 - 1.00
F	Long queues of traffic; unstable flow; stoppages of long duration; traffic volume and traffic speed can drop to zero; traffic volume will be less than the volume which occurs at Level of Service E.	Not Meaningful

(a) ICU (Intersection Capacity Utilization) at various Levels of Service versus Level of Service E for urban arterial streets.

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P.
INTERVAL: AM PEAK HOUR
INTERSECTION: BLOOMFIELD ST & LINCOLN AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	2	0	3400	0	462		50	0.14	0.14	0.15	
NT	0	0	0	0	0		0				
NR	1	0	1700	0	113		5	0.07	0.07	0.07	
SL	0	0	0	0	0		0				
ST	0	0	0	0	0		0				
SR	0	0	0	0	0		0				
EL	0	0	0	0	0		0				
ET	2	0	3400	0	559		110	0.16	0.16	0.20	
ER	1	0	1700	0	255		260	0.15	0.15	0.30	
WL	1	0	1700	0	44		10	0.03	0.03	0.03	
WT	2	0	3400	0	699		75	0.21	0.21	0.23	
WR	0	0	0	0	0		0				
NORTH/SOUTH CRITICAL SUMS =								0.14	0.14	0.15	0.00
EAST/WEST CRITICAL SUMS =								0.21	0.21	0.23	0.00
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.40	0.40	0.43	0.05
LOS =								A	A	A	A

ICU SPREADSHEET FILE NAME | BLOM&LIN |

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALIZED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILISATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P.

INTERVAL: PM PEAK HOUR

INTERSECTION: BLOOMFIELD ST & LINCOLN AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	2		3400	0	386		220	0.11 *	0.11 *	0.18 *	*
NT	0		0	0	0		0				
NR	1		1700	0	149		20	0.09	0.09	0.10	
SL	0		0	0	0		0				
ST	0		0	0	0		0	*	*	*	*
SR	0		0	0	0		0				
EL	0		0	0	0		0				*
ET	2		3400	0	683		260	0.26 *	0.26 *	0.34 *	*
ER	1		1700	0	477		65	0.28	0.28	0.32	
WL	1		1700	0	79		15	0.05 *	0.05 *	0.06 *	*
WT	2		3400	0	647		270	0.19	0.19	0.27	*
WR	0		0	0	0		0				
NORTH/SOUTH CRITICAL SUMS =								0.11	0.11	0.18	0.00
EAST/WEST CRITICAL SUMS =								0.31	0.31	0.40	0.00
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.47	0.47	0.63	0.05
LOS =								A	A	B	A

ICU SPREADSHEET FILE NAME BLOM&LIN

N = NORTHBOUND, S = SOUTHBOUND

E = EASTBOUND, W = WESTBOUND

L = LEFT, T = THROUGH, R = RIGHT

N.S. = NOT SIGNALISED

LOS = LEVEL OF SERVICE

* DENOTES CRITICAL MOVEMENTS

NORTH/SOUTH CRITICAL SUMS =

EAST/WEST CRITICAL SUMS =

CLEARANCE =

ICU VALUE =

LOS =

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P. **LOSE**
INTERVAL: AM PEAK HOUR
INTERSECTION: MOODY ST & LINCOLN AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	1	1700	1700	107		10	0.06	0.06	0.07	0.07
NT	2	2	3400	3400	566		50	0.19 *	0.19 *	0.22 *	0.22 *
NR	0	0	0	0	86		30				
SL	1	1	1700	1700	218		5	0.13 *	0.13 *	0.13 *	0.13 *
ST	2	2	3400	3400	530		240	0.19	0.19	0.27	0.27
SR	0	0	0	0	109		35				
EL	1	1	1700	1700	108		20	0.06	0.06	0.08	0.08
ET	2	3	3400	5100	504		120	0.17 *	0.17 *	0.21 *	0.14 *
ER	0	0	0	0	61		25				
WL	1	1	1700	1700	138		45	0.08 *	0.08 *	0.11 *	0.11 *
WT	2	3	3400	5100	477		135	0.17	0.17	0.21	0.14
WR	0	0	0	0	92		15				
NORTH/SOUTH CRITICAL SUMS =								0.32	0.32	0.35	0.35
EAST/WEST CRITICAL SUMS =								0.25	0.25	0.32	0.25
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.62	0.62	0.72	0.65
LOS =								B	B	C	B

ICU SPREADSHEET FILE NAME MOOD&LIN

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALIZED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

NORTH/SOUTH CRITICAL SUMS =
EAST/WEST CRITICAL SUMS =
CLEARANCE =
ICU VALUE =
LOS =

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P. LOS E

INTERVAL: PM PEAK HOUR

INTERSECTION: MOODY ST & LINCOLN AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	1	1700	1700	118		55	0.07	0.07	0.10	0.10
NT	2	2	3400	3400	732		230	0.24	0.24	0.33	0.33
NR	0	0	0	0	74		100				
SL	1	1	1700	1700	249		50	0.15	0.15	0.18	0.18
ST	2	2	3400	3400	683		90	0.24	0.24	0.30	0.30
SR	0	0	0	0	132		100				
EL	1	1	1700	1700	159		105	0.09	0.09	0.16	0.16
ET	2	3	3400	5100	837		390	0.28	0.28	0.41	0.27
ER	0	0	0	0	113		45				
WL	1	1	1700	1700	173		80	0.10	0.10	0.15	0.15
WT	2	3	3400	5100	708		375	0.24	0.24	0.36	0.24
WR	0	0	0	0	105		40				

ICU SPREADSHEET FILE NAME	MOODELIN	NORTH/SOUTH CRITICAL SUMS =	0.39	0.39	0.51	0.51
		EAST/WEST CRITICAL SUMS =	0.38	0.38	0.56	0.42
		CLEARANCE =	0.05	0.05	0.05	0.05
		ICU VALUE =	0.82	0.82	1.12	0.98
		LOS =	D	D	F	E

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALISED
LOS = LEVEL OF SERVICE
• DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILISATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P. LOS D
INTERVAL: AM PEAK HOUR
INTERSECTION: MOODY ST & LINCOLN AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	2	1700	3400	107		10	0.06	0.06	0.07	0.03 *
NT	2	2	3400	3400	566		50	0.19 *	0.19 *	0.22 *	0.22 *
NR	0	0	0	0	86		30				
SL	1	2	1700	3400	218		5	0.13 *	0.13 *	0.13 *	0.07 *
ST	2	2	3400	3400	530		240	0.19	0.19	0.27	0.27 *
SR	0	0	0	0	109		35				
EL	1	1	1700	1700	108		20	0.06	0.06	0.08	0.08
ET	2	3	3400	5100	504		120	0.17 *	0.17 *	0.21 *	0.14 *
ER	0	0	0	0	61		25				
WL	1	1	1700	1700	138		43	0.08 *	0.08 *	0.11 *	0.11 *
WT	2	3	3400	5100	477		135	0.17	0.17	0.21	0.14
WR	0	0	0	0	92		15				

ICU SPREADSHEET FILE NAME	MOODY&LIN	NORTH/SOUTH CRITICAL SUMS =	0.32	0.32	0.35	0.30
		EAST/WEST CRITICAL SUMS =	0.25	0.25	0.32	0.25
		CLEARANCE =	0.05	0.05	0.05	0.05
		ICU VALUE =	0.62	0.62	0.72	0.60
		LOS =	B	B	C	A

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALISED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILISATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P. LOS E
INTERVAL: AM PEAK HOUR
INTERSECTION: WALKER ST & LINCOLN AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	1	1700	1700	86		10	0.05	0.05	0.06 *	0.06 *
NT	2	2	3400	3400	449		30	0.15 *	0.15 *	0.16	0.16
NR	0	0	0	0	67		10				
SL	1	1	1700	1700	133		0	0.08 *	0.08 *	0.08	0.08
ST	2	2	3400	3400	431		130	0.15	0.15	0.20 *	0.20 *
SR	0	0	0	0	82		20				
EL	1	1	1700	1700	49		10	0.03	0.03	0.03	0.03
ET	2	2	3400	3400	705		90	0.23 *	0.23 *	0.26 *	0.23 *
ER	0	1	0	1700	68		15				0.05
WL	1	1	1700	1700	89		45	0.05 *	0.05 *	0.08 *	0.08 *
WT	2	2	3400	3400	472		175	0.16	0.16	0.21	0.19
WR	0	1	0	1700	62		0				0.04
NORTH/SOUTH CRITICAL SUMS =								0.23	0.23	0.26	0.26
EAST/WEST CRITICAL SUMS =								0.28	0.28	0.34	0.31
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.56	0.56	0.65	0.62

ICU SPREADSHEET FILE NAME WALK&LIN

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALISED
LOS = LEVEL OF SERVICE

INTERSECTION CAPACITY UTILISATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P. LOS E
INTERVAL: PM PEAK HOUR
INTERSECTION: WALKER ST & LINCOLN AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	1	1700	1700	203		30	0.12	0.12	0.14	0.14
NT	2	2	3400	3400	861		125	0.28	0.28	0.33	0.33
NR	0	0	0	0	76		60				
SL	1	1	1700	1700	146		0	0.09	0.09	0.09	0.09
ST	2	2	3400	3400	685		50	0.23	0.23	0.26	0.26
SR	0	0	0	0	91		45				
EL	1	1	1700	1700	65		50	0.04	0.04	0.07	0.07
ET	2	2	3400	3400	924		485	0.31	0.31	0.46	0.41
ER	0	1	0	1700	114		25				0.08
WL	1	1	1700	1700	155		30	0.09	0.09	0.11	0.11
WT	2	2	3400	3400	548		420	0.19	0.19	0.32	0.28
WR	0	1	0	1700	108		0				0.06
NORTH/SOUTH CRITICAL SUMS =								0.37	0.37	0.42	0.42
EAST/WEST CRITICAL SUMS =								0.40	0.40	0.57	0.52
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.82	0.82	1.04	0.99
LOS =								D	D	F	E

ICU SPREADSHEET FILE NAME WALK&LIN

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALISED
LOS = LEVEL OF SERVICE
+ DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P.
INTERVAL: AM PEAK HOUR
INTERSECTION: WALKER ST & LINCOLN AVE

LOS D

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	1	1700	1700	86		10	0.05	0.05	0.06 *	0.06 *
NT	2	2	3400	3400	449		30	0.15 *	0.15 *	0.16	0.16
NR	0	0	0	0	67		10				
SL	1	1	1700	1700	133		0	0.08 *	0.08 *	0.08	0.08
ST	2	2	3400	3400	431		130	0.15	0.15	0.20 *	0.20 *
SR	0	0	0	0	82		20				
EL	1	1	1700	1700	49		10	0.03	0.03	0.03	0.03
ET	2	3	3400	5100	705		90	0.23 *	0.23 *	0.26 *	0.17 *
ER	0	0	0	0	68		15				
WL	1	1	1700	1700	89		45	0.05 *	0.05 *	0.08 *	0.08 *
WT	2	3	3400	5100	472		175	0.16	0.16	0.21	0.14
WR	0	0	0	0	62		0				
NORTH/SOUTH CRITICAL SUMS =								0.23	0.23	0.26	0.26
EAST/WEST CRITICAL SUMS =								0.28	0.28	0.34	0.25
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.56	0.56	0.65	0.56
LOS =								A	A	B	A

ICU SPREADSHEET FILE NAME WALK&LIN

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALIZED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P. LOS D
INTERVAL: PM PEAK HOUR
INTERSECTION: WALKER ST & LINCOLN AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	1	1700	1700	203		30	0.12	0.12	0.14	0.14
NT	2	2	3400	3400	861		125	0.28 *	0.28 *	0.33 *	0.33 *
NR	0	0	0	0	76		60				
SL	1	1	1700	1700	146		0	0.09 *	0.09 *	0.09 *	0.09 *
ST	2	2	3400	3400	685		50	0.23	0.23	0.26	0.26
SR	0	0	0	0	91		45				
EL	1	1	1700	1700	65		50	0.04	0.04	0.07	0.07
ET	2	3	3400	5100	924		485	0.31 *	0.31 *	0.46 *	0.30 *
ER	0	0	0	0	114		25				
WL	1	1	1700	1700	155		30	0.09 *	0.09 *	0.11 *	0.11 *
WT	2	3	3400	5100	548		420	0.19	0.19	0.32	0.21
WR	0	0	0	0	108		0				
NORTH/SOUTH CRITICAL SUMS =								0.37	0.37	0.42	0.42
EAST/WEST CRITICAL SUMS =								0.40	0.40	0.57	0.41
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.82	0.82	1.04	0.88
LOS =								D	D	F	D

ICU SPREADSHEET FILE NAME WALK&LIN

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALISED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P.
INTERVAL: AM PEAK HOUR
INTERSECTION: VALLEY VIEW ST & LINCOLN AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	2	0	3400	0	132		15	0.04	0.04	0.04	
NT	3	0	5100	0	869	-85	50	0.17	0.15	0.16	
NR	1	0	1700	0	104		10	0.06	0.06	0.07	
SL	2	0	3400	0	89		15	0.03	0.03	0.03	
ST	3	0	5100	0	1141	-115	580	0.24	0.22	0.34	
SR	0	0	0	0	84		40				
EL	1	0	1700	0	235		35	0.14	0.14	0.16	
ET	2	0	3400	0	393		85	0.12	0.12	0.14	
ER	1	0	1700	0	118		20	0.07	0.07	0.08	
WL	1	0	1700	0	138		5	0.08	0.08	0.08	
WT	2	0	3400	0	439		105	0.13	0.13	0.16	
WR	1	0	1700	0	39		15	0.02	0.02	0.03	
NORTH/SOUTH CRITICAL SUMS =								0.28	0.26	0.38	0.00
EAST/WEST CRITICAL SUMS =								0.27	0.27	0.32	0.00
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.60	0.58	0.75	0.05
LOS =								A	A	C	A

ICU SPREADSHEET FILE NAME VAVM&LIN

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALIZED
LOS = LEVEL OF SERVICE
+ DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P.
INTERVAL: PM PEAK HOUR
INTERSECTION: VALLEY VIEW ST & LINCOLN AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	2	0	3400	0	235		50	0.07 *	0.07 *	0.08	*
NT	3	0	5100	0	1197	-120	400	0.23	0.21	0.29 *	
NR	1	0	1700	0	186		25	0.11	0.11	0.12	
SL	2	0	3400	0	167		40	0.05	0.05	0.06 *	
ST	3	0	5100	0	1038	-105	40	0.22 *	0.20 *	0.24	*
SR	0	0	0	0	107		163				
EL	1	0	1700	0	298		155	0.18 *	0.18 *	0.27 *	*
ET	2	0	3400	0	652		265	0.19	0.19	0.27	
ER	1	0	1700	0	193		45	0.11	0.11	0.14	
WL	1	0	1700	0	185		30	0.11	0.11	0.13	
WT	2	0	3400	0	512		260	0.15 *	0.15 *	0.23 *	*
WR	1	0	1700	0	96		40	0.06	0.06	0.08	
NORTH/SOUTH CRITICAL SUMS =								0.29	0.27	0.35	0.00
EAST/WEST CRITICAL SUMS =								0.33	0.33	0.50	0.00
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.67	0.65	0.90	0.05
LOS =								B	B	D	A

ICU SPREADSHEET FILE NAME VAVW&LIN

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALIZED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILISATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P.
INTERVAL: AM PEAK HOUR
INTERSECTION: VALLEY VIEW ST & ORANGE AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	0	1700	0	106		15	0.06	0.06	0.07 *	*
NT	3	0	5100	0	1855	-185	105	0.39	0.35	0.37	
NR	0	0	0	0	129		0				
SL	1	0	1700	0	107		0	0.06	0.06	0.06	
ST	3	0	5100	0	1630	-165	615	0.34	0.30	0.42 *	*
SR	0	0	0	0	80		0				
EL	1	0	1700	0	127		0	0.07	0.07	0.07 *	*
ET	2	0	3400	0	236		10	0.07	0.07	0.07	
ER	1	0	1700	0	90		10	0.05	0.05	0.06	
WL	1	0	1700	0	193		0	0.11	0.11	0.11	
WT	2	0	3400	0	504		15	0.19	0.19	0.20 *	*
WR	0	0	0	0	149		0				
NORTH/SOUTH CRITICAL SUMS =								0.45	0.41	0.49	0.00
EAST/WEST CRITICAL SUMS =								0.26	0.26	0.27	0.00
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.76	0.72	0.81	0.05
LOS =								C	C	D	A

ICU SPREADSHEET FILE NAME VAVW&ORG
N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALISED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILISATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P.
INTERVAL: PM PEAK HOUR
INTERSECTION: VALLEY VIEW ST & ORANGE AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	0	1700	0	165		45	0.10 *	0.10 *	0.12	*
NT	3	0	5100	0	1392	-140	475	0.29	0.27	0.36 *	
NR	0	0	0	0	109		0				
SL	1	0	1700	0	135		0	0.08	0.08	0.08 *	
ST	3	0	5100	0	1429	-145	90	0.29 *	0.27 *	0.28	*
SR	0	0	0	0	73		0				
EL	1	0	1700	0	108		0	0.06 *	0.06 *	0.06 *	*
ET	2	0	3400	0	386		45	0.11	0.11	0.13	
ER	1	0	1700	0	103		45	0.06	0.06	0.09	
WL	1	0	1700	0	101		0	0.06	0.06	0.06	
WT	2	0	3400	0	298		45	0.12 *	0.12 *	0.14 *	*
WR	0	0	0	0	123		0				
NORTH/SOUTH CRITICAL SUMS =								0.39	0.37	0.44	0.00
EAST/WEST CRITICAL SUMS =								0.18	0.18	0.20	0.00
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.62	0.60	0.69	0.05
LOS =								B	A	B	A

ICU SPREADSHEET FILE NAME VAVM&ORG

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALISED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P. LOS EF
INTERVAL: AM PEAK HOUR
INTERSECTION: VALLEY VIEW ST & BALL RD

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	1	1700	1700	152		5	0.09	0.09	0.09 *	0.09
NT	3	3	5100	5100	1481	-150	120	0.30 *	0.27 *	0.30	0.30 *
NR	0	0	0	0	67		0				
SL	1	1	1700	1700	85		0	0.05 *	0.05 *	0.05	0.05 *
ST	3	3	5100	5100	908	-90	330	0.22	0.20	0.26 *	0.23
SR	0	1	0	1700	190		0				0.11
EL	1	2	1700	3400	197		5	0.12 *	0.12 *	0.12	0.06
ET	2	2	3400	3400	862		10	0.25	0.25	0.26 *	0.26 *
ER	1	1	1700	1700	66		5	0.04	0.04	0.04	0.04
WL	1	2	1700	3400	161		0	0.09	0.09	0.09 *	0.05 *
WT	2	2	3400	3400	646		5	0.22 *	0.22 *	0.22	0.22
WR	0	0	0	0	102		0				
NORTH/SOUTH CRITICAL SUMS =								0.35	0.32	0.35	0.35
EAST/WEST CRITICAL SUMS =								0.34	0.34	0.35	0.31
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.74	0.71	0.75	0.71
LOS =								C	C	C	C

ICU SPREADSHEET FILE NAME VAVN&BAL

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALIZED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P. *LOS F*
INTERVAL: PM PEAK HOUR
INTERSECTION: VALLEY VIEW ST & BALL RD

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EXISTING +OTHER +PROJECT V/C	EXISTING +OTHER +PROJECT V/C-W_IMP
NL	1	1	1700	1700	312		20	0.18	0.18	0.20	0.20
NT	3	3	5100	5100	1817	-180	490	0.39	0.35	0.45	0.45
NR	0	0	0	0	152		0				
SL	1	1	1700	1700	222		0	0.13	0.13	0.13	0.13
ST	3	3	5100	5100	1476	-150	120	0.33	0.30	0.33	0.28
SR	0	1	0	1700	207		5				0.12
EL	1	2	1700	3400	252		5	0.15	0.15	0.15	0.08
ET	2	2	3400	3400	921		25	0.27	0.27	0.28	0.28
ER	1	1	1700	1700	151		20	0.09	0.09	0.10	0.10
WL	1	2	1700	3400	225		0	0.13	0.13	0.13	0.07
WT	2	2	3400	3400	726		30	0.25	0.25	0.26	0.26
WR	0	0	0	0	121		0				
NORTH/SOUTH CRITICAL SUMS =								0.52	0.48	0.58	0.58
ICU SPREADSHEET FILE NAME VAVN&BAL								0.40	0.40	0.41	0.35
M = NORTHBOUND, S = SOUTHBOUND								0.05	0.05	0.05	0.05
E = EASTBOUND, W = WESTBOUND								0.97	0.93	1.04	0.98
L = LEFT, T = THROUGH, R = RIGHT								E	E	F	E
N.S. = NOT SIGNALIZED											
LOS = LEVEL OF SERVICE											
* DENOTES CRITICAL MOVEMENTS											
LOS =											

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P. LOS D
INTERVAL: AM PEAK HOUR
INTERSECTION: VALLEY VIEW ST & BALL RD

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	2	1700	3400	152		5	0.09	0.09	0.09 *	0.05
NT	3	3	5100	5100	1481	-150	120	0.30 *	0.27 *	0.30	0.28 *
NR	0	1	0	1700	67		0				0.04
SL	1	2	1700	3400	85		0	0.05 *	0.05 *	0.05	0.03 *
ST	3	3	5100	5100	908	-90	330	0.22	0.20	0.26 *	0.26
SR	0	0	0	0	190		0				
EL	1	2	1700	3400	197		5	0.12 *	0.12 *	0.12	0.06
ET	2	2	3400	3400	862		10	0.25	0.25	0.26 *	0.26 *
ER	1	1	1700	1700	66		5	0.04	0.04	0.04	0.04
WL	1	2	1700	3400	161		0	0.09	0.09	0.09 *	0.05 *
WT	2	2	3400	3400	646		5	0.22 *	0.22 *	0.22	0.22
WR	0	0	0	0	102		0				
NORTH/SOUTH CRITICAL SUMS =								0.35	0.32	0.35	0.31
EAST/WEST CRITICAL SUMS =								0.34	0.34	0.35	0.31
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.74	0.71	0.75	0.67
LOS =								C	C	C	B

ICU SPREADSHEET FILE NAME VAVW&BAL

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALIZED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P. LOS D
INTERVAL: PM PEAK HOUR
INTERSECTION: VALLEY VIEW ST & BALL RD

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	2	1700	3400	312		20	0.18	0.18 *	0.20	0.10
NT	3	3	5100	5100	1817	-180	490	0.39 *	0.35	0.45 *	0.42 *
NR	0	1	0	1700	152		0			0.09	
SL	1	2	1700	3400	222		0	0.13 *	0.13	0.13 *	0.07 *
ST	3	3	5100	5100	1476	-150	120	0.33	0.30 *	0.33	0.33
SR	0	0	0	0	207		5				
EL	1	2	1700	3400	252		5	0.15	0.15	0.15	0.08
ET	2	2	3400	3400	921		25	0.27 *	0.27 *	0.28 *	0.28 *
ER	1	1	1700	1700	151		20	0.09	0.09	0.10	0.10
WL	1	2	1700	3400	225		0	0.13 *	0.13 *	0.13 *	0.07 *
WT	2	2	3400	3400	726		30	0.25	0.25	0.26	0.26
WR	0	0	0	0	121		0				
NORTH/SOUTH CRITICAL SUMS =								0.52	0.48	0.58	0.49
ICU SPREADSHEET FILE NAME VAVW&BAL								0.40	0.40	0.41	0.35
N = NORTHBOUND, S = SOUTHBOUND								0.05	0.05	0.05	0.05
E = EASTBOUND, W = WESTBOUND								0.97	0.93	1.04	0.89
L = LEFT, T = THROUGH, R = RIGHT								E	E	F	D
N.S. = NOT SIGNALISED											
LOS = LEVEL OF SERVICE											
* DENOTES CRITICAL MOVEMENTS											
LOS =											

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P.
INTERVAL: AM PEAK HOUR
INTERSECTION: VALLEY VIEW ST & CERRITOS AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	0	1700	0	247		60	0.15 +	0.15 +	0.18 +	
NT	3	0	5100	0	1530	-185	165	0.30	0.26	0.30	
NR	1	0	1700	0	42		40	0.02	0.02	0.05	
SL	1	0	1700	0	70		0	0.04	0.04	0.04	
ST	3	0	5100	0	979	-115	445	0.19 +	0.17 +	0.26 +	
SR	1	0	1700	0	60		125	0.04	0.04	0.11	
EL	2	0	3400	0	69		20	0.02 +	0.02 +	0.03 +	
ET	3	0	5100	0	361		25	0.07	0.07	0.08	
ER	1	0	1700	0	199		-20	0.12	0.12	0.11	
WL	2	0	3400	0	136		240	0.04	0.04	0.11	
WT	2	0	3400	0	656		230	0.22 +	0.22 +	0.29 +	
WR	0	0	0	0	75		30				
NORTH/SOUTH CRITICAL SUMS =								0.34	0.32	0.44	0.00
EAST/WEST CRITICAL SUMS =								0.24	0.24	0.32	0.00
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.63	0.61	0.81	0.05
LOS =								B	B	D	A

ICU SPREADSHEET FILE NAME VAVW&CER

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALISED
LOS = LEVEL OF SERVICE
+ DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P.
INTERVAL: PM PEAK HOUR
INTERSECTION: VALLEY VIEW ST & CERRITOS AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	0	1700	0	236		-30	0.14	0.14	0.12	*
NT	3	0	5100	0	2060	-245	430	0.40	0.36	0.44	*
NR	1	0	1700	0	242		185	0.14	0.14	0.25	
SL	1	0	1700	0	151		-25	0.09	0.09	0.07	*
ST	3	0	5100	0	1099	-130	220	0.22	0.19	0.23	*
SR	1	0	1700	0	123		10	0.07	0.07	0.08	
EL	2	0	3400	0	269		85	0.08	0.08	0.10	*
ET	3	0	5100	0	874		115	0.17	0.17	0.19	
ER	1	0	1700	0	205		35	0.12	0.12	0.14	
WL	2	0	3400	0	88		40	0.03	0.03	0.04	
WT	2	0	3400	0	470		-30	0.18	0.18	0.15	*
WR	0	0	0	0	129		-45				
NORTH/SOUTH CRITICAL SUMS =								0.49	0.45	0.51	0.00
EAST/WEST CRITICAL SUMS =								0.26	0.26	0.25	0.00
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.80	0.76	0.81	0.05
LOS =								C	C	D	A

ICU SPREADSHEET FILE NAME VAVW&CER

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALISED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P. *LOS E*
INTERVAL: AM PEAK HOUR
INTERSECTION: VALLEY VIEW ST & KATELLA

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-M_IMP
NL	2	3	3400	5100	1017		320	0.30 *	0.30 *	0.39 *	0.26 *
NT	3	3	5100	5100	1763	-265	305	0.35	0.29	0.35	0.35
NR	1	1	1700	1700	182		-15	0.11	0.11	0.10	0.10
BL	2	2	3400	3400	107		20	0.03	0.03	0.04	0.04
BT	3	3	5100	5100	980	-145	280	0.22 *	0.19 *	0.26 *	0.26 *
BR	0	0	0	0	122		90				
EL	2	2	3400	3400	164		10	0.05 *	0.05 *	0.05 *	0.05 *
ET	3	3	5100	5100	735		95	0.14	0.14	0.16	0.16
ER	FREE	FREE	N.S.	N.S.	398		185	N.S.	N.S.	N.S.	N.S.
WL	2	2	3400	3400	91		160	0.03	0.03	0.07	0.07
WT	3	3	5100	5100	1105		655	0.23 *	0.23 *	0.37 *	0.37 *
WR	0	0	0	0	79		60				
NORTH/SOUTH CRITICAL SUMS =								0.52	0.49	0.65	0.52
EAST/WEST CRITICAL SUMS =								0.28	0.28	0.42	0.42
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.85	0.82	1.12	0.99
LOS =								D	D	F	E

ICU SPREADSHEET FILE NAME VAVM&KAT

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALIZED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P. LOS E
INTERVAL: PM PEAK HOUR
INTERSECTION: VALLEY VIEW ST & KATELLA

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EXISTING +PROJECT V/C	EXISTING +PROJECT V/C-W_IMP
NL	2	3	3400	5100	586		175	0.17 *	0.17 *	0.22 *	0.15 *
NT	3	3	5100	5100	1259	-190	280	0.25	0.21	0.26	0.26
NR	1	1	1700	1700	106		115	0.06	0.06	0.13	0.13
SL	2	2	3400	3400	169		40	0.05	0.05	0.06	0.06
ST	3	3	5100	5100	1802	-270	300	0.38 *	0.33 *	0.39 *	0.39 *
SR	0	0	0	0	155		15				
EL	2	2	3400	3400	205		70	0.06 *	0.06 *	0.08	0.08
ET	3	3	5100	5100	1022		485	0.20	0.20	0.30 *	0.30 *
ER	FREE	FREE	N.S.	N.S.	1074		270	N.S.	N.S.	N.S.	N.S.
WL	2	2	3400	3400	266		-10	0.08	0.08	0.08 *	0.08 *
WT	3	3	5100	5100	1252		85	0.27 *	0.27 *	0.29	0.29
WR	0	0	0	0	141		5				
NORTH/SOUTH CRITICAL SUMS =								0.55	0.50	0.61	0.54
EAST/WEST CRITICAL SUMS =								0.33	0.33	0.38	0.38
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.93	0.88	1.04	0.97
LOS =								E	D	F	E

ICU SPREADSHEET FILE NAME VAVW&KAT

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALIZED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P. LOS D
INTERVAL: AM PEAK HOUR
INTERSECTION: VALLEY VIEW ST & KATELLA

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	2	3	3400	5100	1017		320	0.30 *	0.30 *	0.39 *	0.26 *
NT	3	3	5100	5100	1763	-265	305	0.35	0.29	0.35	0.35
NR	1	1	1700	1700	182		-15	0.11	0.11	0.10	0.10
SL	2	2	3400	3400	107		20	0.03	0.03	0.04	0.04
ST	3	4	5100	6800	980	-145	280	0.22 *	0.19 *	0.26 *	0.16 *
SR	0	1	0	1700	122		90				0.12
EL	2	2	3400	3400	164		10	0.05 *	0.05 *	0.05 *	0.05 *
ET	3	3	5100	5100	735		95	0.14	0.14	0.16	0.16
ER	FREE	FREE	N.S.	N.S.	398		185	N.S.	N.S.	N.S.	N.S.
WL	2	2	3400	3400	91		160	0.03	0.03	0.07	0.07
WT	3	3	5100	5100	1105		655	0.23 *	0.23 *	0.37 *	0.37 *
WR	0	0	0	0	79		60				
NORTH/SOUTH CRITICAL SUMS =								0.52	0.49	0.65	0.42
EAST/WEST CRITICAL SUMS =								0.28	0.28	0.42	0.42
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.85	0.82	1.12	0.89
LOS =								D	D	F	D

ICU SPREADSHEET FILE NAME VAVW&KAT

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALIZED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P. LOS D
INTERVAL: PM PEAK HOUR
INTERSECTION: VALLEY VIEW ST & KATELLA

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	2	3	3400	5100	586		175	0.17 *	0.17 *	0.22 *	0.15 *
NT	3	3	5100	5100	1259	-190	280	0.25	0.21	0.26	0.26
NR	1	1	1700	1700	106		115	0.06	0.06	0.13	0.13
SL	2	2	3400	3400	169		40	0.05	0.05	0.06	0.06
ST	3	4	5100	6800	1802	-270	300	0.38 *	0.33 *	0.39 *	0.27 *
SR	0	1	0	1700	155		15				0.10
EL	2	2	3400	3400	205		70	0.06 *	0.06 *	0.08	0.08
ET	3	3	5100	5100	1022		485	0.20	0.20	0.30 *	0.30 *
ER	FREE	FREE	N.S.	N.S.	1074		270	N.S.	N.S.	N.S.	N.S.
WL	2	2	3400	3400	266		-10	0.08	0.08	0.08 *	0.08 *
WT	3	3	5100	5100	1252		85	0.27 *	0.27 *	0.29	0.29
WR	0	0	0	0	141		5				
NORTH/SOUTH CRITICAL SUMS =								0.55	0.50	0.61	0.42
EAST/WEST CRITICAL SUMS =								0.33	0.33	0.38	0.38
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.93	0.88	1.04	0.85
LOS =								E	D	F	D

ICU SPREADSHEET FILE NAME VAVW&KAT

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALIZED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P.
INTERVAL: AM PEAK HOUR
INTERSECTION: VALLEY VIEW ST & ORANGEWOOD AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	0	1700	0	24		0	0.01	0.01	0.01	*
NT	3	0	3100	0	2260	-65	625	0.45	0.44	0.56	*
NR	0	0	0	0	55		0				
SL	2	0	3400	0	160	-65	0	0.05	0.03	0.03	*
ST	3	0	3100	0	1347	-145	115	0.27	0.24	0.27	*
SR	0	0	0	0	47		0				
EL	1	0	1700	0	132		0	0.08	0.08	0.08	*
ET	1	0	1700	0	46		0	0.03	0.03	0.03	
ER	1	0	1700	0	20		0	0.01	0.01	0.01	
WL	1	0	1700	0	88		0	0.05	0.05	0.05	
WT	2	0	3400	0	23		0	0.22	0.18	0.18	*
WR	0	0	0	0	720	-135	0				
NORTH/SOUTH CRITICAL SUMS =								0.50	0.47	0.59	0.00
EAST/WEST CRITICAL SUMS =								0.30	0.26	0.26	0.00
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.85	0.78	0.90	0.05
LOS =								D	C	D	A

ICU SPREADSHEET FILE NAME VAVW&ORN

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALIZED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P.
INTERVAL: PM PEAK HOUR
INTERSECTION: VALLEY VIEW ST & ORANGEWOOD AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	0	1700	0	8		0	0.00	0.00 *	0.00 *	*
NT	3	0	5100	0	1619	-95	135	0.34 *	0.32	0.35	
NR	0	0	0	0	128		0				
SL	2	0	3400	0	621	-135	0	0.18 *	0.14	0.14	
ST	3	0	5100	0	2424	-135	505	0.49	0.47 *	0.57 *	*
SR	0	0	0	0	91		0				
EL	1	0	1700	0	84		0	0.05 *	0.05 *	0.05 *	*
ET	1	0	1700	0	38		0	0.02	0.02	0.02	
ER	1	0	1700	0	35		0	0.02	0.02	0.02	
WL	1	0	1700	0	96		0	0.06	0.06	0.06	
WT	2	0	3400	0	31		0	0.10 *	0.07 *	0.07 *	*
WR	0	0	0	0	297	-95	0				
NORTH/SOUTH CRITICAL SUMS =								0.52	0.47	0.57	0.00
EAST/WEST CRITICAL SUMS =								0.15	0.12	0.12	0.00
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.72	0.64	0.74	0.05
LOS =								C	B	C	A

ICU SPREADSHEET FILE NAME VAVW&ORN

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALIZED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILISATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P.
INTERVAL: AM PEAK HOUR
INTERSECTION: LEXINGTON DR & KATELLA AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	0	0	0	0	83		0			*	*
NT	1	0	1700	0	0		5	0.05	0.05	0.05	
NR	1	0	1700	0	95		0	0.06	0.06	0.06	
SL	0	0	0	0	3		66		*	*	
ST	1	0	1700	0	0		8	0.00	0.00	0.07	*
SR	0	0	0	0	4		36				
EL	1	0	1700	0	2		24	0.00	0.00	0.02	*
ET	3	0	5100	0	1417		1435	0.28	0.28	0.56	*
ER	1	0	1700	0	86		0	0.05	0.05	0.05	
WL	1	0	1700	0	73		0	0.04	0.04	0.04	*
WT	3	0	5100	0	1356		245	0.27	0.27	0.32	*
WR	0	0	0	0	12		29				
NORTH/SOUTH CRITICAL SUMS =								0.05	0.05	0.07	0.00
EAST/WEST CRITICAL SUMS =								0.32	0.32	0.60	0.00
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.42	0.42	0.72	0.05
LOS =								A	A	C	A

ICU SPREADSHEET FILE NAME LEX&KAT

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALISED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P.

INTERVAL: PM PEAK HOUR

INTERSECTION: LEXINGTON DR & KATELLA AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	0	0	0	0	155		0			*	*
NT	1	0	1700	0	0		18	0.09	*	0.09	*
NR	1	0	1700	0	173		0	0.10		0.10	
BL	0	0	0	0	9		78		*	*	
ST	1	0	1700	0	0		14	0.01		0.01	*
SR	0	0	0	0	4		68				
EL	1	0	1700	0	6		82	0.00		0.00	*
ET	3	0	5100	0	1823		255	0.36	*	0.36	*
ER	1	0	1700	0	142		0	0.08		0.08	
WL	1	0	1700	0	78		0	0.05	*	0.05	*
WT	3	0	5100	0	1595		1125	0.31		0.31	*
WR	0	0	0	0	0		107				
NORTH/SOUTH CRITICAL SUMS =								0.09	0.09	0.10	0.00
EAST/WEST CRITICAL SUMS =								0.41	0.41	0.60	0.00
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.55	0.55	0.75	0.05
LOS =								A	A	C	A

ICU SPREADSHEET FILE NAME | LEX&KAT |

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALIZED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P.
INTERVAL: AM PEAK HOUR
INTERSECTION: WALKER ST & KATELLA AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	0	0	0	0			0				*
NT	0	0	0	0			0	*	*	*	
NR	0	0	0	0			0				
SL	2	0	3400	0	568		595	0.17	0.17	0.34	*
ST	0	0	0	0			0				*
SR	1	0	1700	0	141		45	0.08	0.08	0.11	
EL	2	0	3400	0	173		75	0.05	0.05	0.07	*
ET	3	0	5100	0	1390		370	0.27	0.27	0.35	
ER	0	0	0	0			0				
WL	1	0	1700	0			0	0.00	0.00	0.00	
WT	3	0	5100	0	1752		270	0.34	0.34	0.40	*
WR	1	0	1700	0	285		580	0.17	0.17	0.51	
NORTH/SOUTH CRITICAL SUMS =								0.17	0.17	0.34	0.00
EAST/WEST CRITICAL SUMS =								0.39	0.39	0.47	0.00
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.61	0.61	0.86	0.05
LOS =								B	B	D	A

ICU SPREADSHEET FILE NAME WALK&KAT

M = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALIZED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILISATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P.
INTERVAL: PM PEAK HOUR
INTERSECTION: WALKER ST & KATELLA AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	0	0	0	0			0				*
NT	0	0	0	0			0	*	*	*	
NR	0	0	0	0			0				
SL	2	0	3400	0	616		500	0.18	0.18	0.33	*
ST	0	0	0	0			0				*
SR	1	0	1700	0	208		205	0.12	0.12	0.24	
EL	2	0	3400	0	235		0	0.07	0.07	0.07	*
ET	3	0	5100	0	1634		225	0.32	0.32	0.36	
ER	0	0	0	0			0				
WL	1	0	1700	0			0	0.00	0.00	0.00	
WT	3	0	5100	0	1477		305	0.29	0.29	0.35	*
WR	1	0	1700	0	575		510	0.34	0.34	0.64	
NORTH/SOUTH CRITICAL SUMS =								0.18	0.18	0.33	0.00
EAST/WEST CRITICAL SUMS =								0.36	0.36	0.42	0.00
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.59	0.59	0.80	0.05
LOS =								A	A	C	A

ICU SPREADSHEET FILE NAME WALK&KAT

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALIZED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P.
INTERVAL: AM PEAK HOUR
INTERSECTION: HOLDER ST & KATELLA AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	0	1700	0	15	25	-30	0.01	0.02	0.01	*
NT	2	0	3400	0	15	275	70	0.01	0.10	0.12	*
NR	0	0	0	0	14	25	0				
SL	1	0	1700	0	134		-20	0.08	0.08	0.07	*
ST	2	0	3400	0	36	200	45	0.03	0.09	0.10	*
SR	0	0	0	0	73		-5				
EL	1	0	1700	0	166		-5	0.10	0.10	0.09	*
ET	3	0	5100	0	839		30	0.16	0.16	0.17	
ER	1	0	1700	0	86	15	-55	0.05	0.06	0.03	
WL	1	0	1700	0	87	15	20	0.05	0.06	0.07	
WT	3	0	5100	0	957		765	0.19	0.19	0.34	*
WR	1	0	1700	0	200		-20	0.12	0.12	0.11	
NORTH/SOUTH CRITICAL SUMS =								0.09	0.18	0.19	0.00
EAST/WEST CRITICAL SUMS =								0.29	0.29	0.43	0.00
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.43	0.52	0.67	0.05
LOS =								A	A	B	A

ICU SPREADSHEET FILE NAME: \HOLD&KAT

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALIZED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P.
INTERVAL: PM PEAK HOUR
INTERSECTION: HOLDER ST & KATELLA AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	0	1700	0	96	20	-50	0.06	0.07	0.04	*
NT	2	0	3400	0	113	260	25	0.06	0.14	0.15	*
NR	0	0	0	0	99	20	0				
SL	1	0	1700	0	203		-20	0.12	0.12	0.11	*
ST	2	0	3400	0	11	305	45	0.02	0.11	0.12	*
SR	0	0	0	0	63		-20				
EL	1	0	1700	0	18		-20	0.01	0.01	0.00	*
ET	3	0	5100	0	1529		540	0.30	0.30	0.41	*
ER	1	0	1700	0	90	25	-30	0.05	0.07	0.05	
WL	1	0	1700	0	12	25	-15	0.01	0.02	0.01	*
WT	3	0	5100	0	1045		15	0.20	0.20	0.21	*
WR	1	0	1700	0	184		-20	0.11	0.11	0.10	

ICU SPREADSHEET FILE NAME: HOLD&RAT

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALISED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

NORTH/SOUTH CRITICAL SUMS =

EAST/WEST CRITICAL SUMS =

CLEARANCE =

ICU VALUE =

LOS =

0.18	0.26	0.26	0.00
0.31	0.32	0.42	0.00
0.05	0.05	0.05	0.05
0.54	0.63	0.73	0.05
A	B	C	A

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P. LOS C
INTERVAL: AM PEAK HOUR
INTERSECTION: KNOTT AVE & KATELLA AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	1	1700	1700	291		-5	0.17 *	0.17 *	0.17 *	0.17 *
NT	2	2	3400	3400	652	-65	-10	0.19	0.17	0.17	0.17
NR	1	1	1700	1700	113		-5	0.07	0.07	0.06	0.06
SL	1	1	1700	1700	117		0	0.07	0.07	0.07	0.07
ST	2	2	3400	3400	854	-85	-35	0.25 *	0.23 *	0.22 *	0.22 *
SR	1	1	1700	1700	145		-25	0.09	0.09	0.07	0.07
XL	1	1	1700	1700	41		-10	0.02	0.02	0.02 *	0.02 *
ET	2	3	3400	5100	664		125	0.20 *	0.20 *	0.23	0.18
ER	1	0	1700	0	125		-5	0.07	0.07	0.07	
WL	1	1	1700	1700	129		-20	0.08 *	0.08 *	0.06	0.06
WT	3	3	5100	5100	846		750	0.17	0.17	0.32 *	0.32 *
WR	0	0	0	0	21		0				
NORTH/SOUTH CRITICAL SUMS =								0.42	0.40	0.39	0.39
EAST/WEST CRITICAL SUMS =								0.28	0.28	0.34	0.34
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.75	0.73	0.78	0.78
LOS =								C	C	C	C

ICU SPREADSHEET FILE NAME KNOT&KAT

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALISED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILISATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P. 666
INTERVAL: PM PEAK HOUR
INTERSECTION: KNOTT AVE & KATELLA AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	1	1700	1700	237		-20	0.14	0.14	0.13	0.13
NT	2	2	3400	3400	1089	-110	-30	0.32	0.29	0.28	0.28
NR	1	1	1700	1700	88		-15	0.05	0.05	0.04	0.04
SL	1	1	1700	1700	165		0	0.10	0.10	0.10	0.10
ST	2	2	3400	3400	865	-85	-10	0.25	0.23	0.23	0.23
SR	1	1	1700	1700	66		-25	0.04	0.04	0.02	0.02
EL	1	1	1700	1700	213		-35	0.13	0.13	0.10	0.10
ET	2	3	3400	5100	1094		560	0.32	0.32	0.49	0.39
ER	1	0	1700	0	337		-20	0.20	0.20	0.19	
WL	1	1	1700	1700	211		-5	0.12	0.12	0.12	0.12
WT	3	3	5100	5100	651		105	0.15	0.15	0.17	0.17
WR	0	0	0	0	109		0				
NORTH/SOUTH CRITICAL SUMS =								0.42	0.39	0.38	0.38
EAST/WEST CRITICAL SUMS =								0.44	0.44	0.61	0.51
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.91	0.88	1.04	0.94
LOS =								E	D	F	E

ICU SPREADSHEET FILE NAME KNOT&KAT

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALISED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILISATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P. LOS D
INTERVAL: AM PEAK HOUR
INTERSECTION: KNOTT AVE & KATELLA AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	1	1700	1700	291		-5	0.17 *	0.17 *	0.17 *	0.17 *
NT	2	2	3400	3400	652	-65	-10	0.19	0.17	0.17	0.17
NR	1	1	1700	1700	113		-5	0.07	0.07	0.06	0.06
SL	1	1	1700	1700	117		0	0.07	0.07	0.07	0.07
ST	2	2	3400	3400	854	-85	-35	0.25 *	0.23 *	0.22 *	0.22 *
SR	1	1	1700	1700	145		-25	0.09	0.09	0.07	0.07
EL	1	1	1700	1700	41		-10	0.02	0.02	0.02 *	0.02 *
ET	2	3	3400	5100	664		125	0.20 *	0.20 *	0.23	0.15
ER	1	1	1700	1700	125		-5	0.07	0.07	0.07	0.07
WL	1	1	1700	1700	129		-20	0.08 *	0.08 *	0.06	0.06
WT	3	3	5100	5100	846		750	0.17	0.17	0.32 *	0.32 *
WR	0	0	0	0	21		0				
NORTH/SOUTH CRITICAL SUMS =								0.42	0.40	0.39	0.39
EAST/WEST CRITICAL SUMS =								0.28	0.28	0.34	0.34
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.75	0.73	0.78	0.78
LOS =								C	C	C	C

ICU SPREADSHEET FILE NAME KNOT&KAT

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALISED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

INTERSECTION CAPACITY UTILIZATION ANALYSIS

PROJECT: CYPRESS CIRCULATION ELEMENT OF G.P. LOS D
INTERVAL: PM PEAK HOUR
INTERSECTION: KNOTT AVE & KATELLA AVE

MOVEMENT	EXIST LANES	PROP LANES	EXISTING CAPACITY	PROPOSED CAPACITY	EXISTING VOLUME	OTHER VOLUME	PROJECT VOLUME	EXISTING V/C	EXISTING + OTHER V/C	EX.+OTHER +PROJECT V/C	EX.+OTHER +PROJECT V/C-W_IMP
NL	1	1	1700	1700	237		-20	0.14	0.14	0.13	0.13
NT	2	2	3400	3400	1089	-110	-30	0.32	0.29	0.28	0.28
NR	1	1	1700	1700	88		-15	0.05	0.05	0.04	0.04
SL	1	1	1700	1700	165		0	0.10	0.10	0.10	0.10
ST	2	2	3400	3400	865	-85	-10	0.25	0.23	0.23	0.23
SR	1	1	1700	1700	66		-25	0.04	0.04	0.02	0.02
EL	1	1	1700	1700	213		-35	0.13	0.13	0.10	0.10
ET	2	3	3400	5100	1094		560	0.32	0.32	0.49	0.32
ER	1	1	1700	1700	337		-20	0.20	0.20	0.19	0.19
WL	1	1	1700	1700	211		-5	0.12	0.12	0.12	0.12
WT	3	3	5100	5100	651		105	0.15	0.15	0.17	0.17
WR	0	0	0	0	109		0				
NORTH/SOUTH CRITICAL SUMS =								0.42	0.39	0.38	0.38
EAST/WEST CRITICAL SUMS =								0.44	0.44	0.61	0.44
CLEARANCE =								0.05	0.05	0.05	0.05
ICU VALUE =								0.91	0.88	1.04	0.87
LOS =								E	D	F	D

ICU SPREADSHEET FILE NAME KNOT&KAT

N = NORTHBOUND, S = SOUTHBOUND
E = EASTBOUND, W = WESTBOUND
L = LEFT, T = THROUGH, R = RIGHT
N.S. = NOT SIGNALIZED
LOS = LEVEL OF SERVICE
* DENOTES CRITICAL MOVEMENTS

CYPRESS



GENERAL PLAN
U P D A T E

Conservation/
Open Space/
Recreation
Element

CYPRESS

GENERAL PLAN
U P D A T E

CITY OF CYPRESS

GENERAL PLAN

CONSERVATION/OPEN SPACE/RECREATION ELEMENT

FEBRUARY, 1993

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INTRODUCTION

The California State Government Code mandates that all general plans include a conservation and open space element. For the City of Cypress General Plan, these two elements have been combined, along with the optional recreation element, primarily due to the overlapping nature of issues addressed in the elements, as relevant to Cypress.

PURPOSE

This Element meets State requirements concerning the conservation and open space elements as defined in Sections 65302d and 65302e of the Government Code. According to these requirements, the conservation element must contain goals and policies that further the protection and maintenance of the State's natural resources; such as water, soils, wildlife, minerals, and other natural resources; and prevents their wasteful exploitation, degradation, and destruction.

The open space element must contain goals and policies concerned with managing all open space areas, including undeveloped lands and outdoor recreation areas. Specifically, the open space element includes open space that is left undeveloped for public health and safety reasons, and open space that is used for the preservation of natural resources, for the managed production of resources, and for outdoor recreation.

The recreation element identifies planned park and recreation facilities designed to support the recreational needs of Cypress' population.

RELATED PLANS AND PROGRAMS

There are a number of existing plans and programs which are directly applicable to the aims and objectives of this Element. These plans and programs were enacted through federal, state, and local legislation.

California Environmental Quality Act Law and Guidelines

The California Environmental Quality Act (CEQA) was adopted by the state legislature in response to a public mandate that called for a thorough environmental analysis of those projects that might adversely affect the environment. The provisions of the law, review procedure, and any subsequent analysis are described in the CEQA Law and Guidelines as amended in 1991. CEQA will continue to be instrumental in ensuring that the impacts of all potentially significant projects are assessed by City officials (both appointed and elected) and the general public.

County of Orange Master Plan of Local Parks

The County's Master Parks Plan provides goals, objectives, policies, and implementation programs for a comprehensive county-wide park network. In conjunction with the County's local park code, specific criteria are intended to provide an adequate supply of usable County parkland. This plan provides a regional park planning context for the Cypress Conservation, Open Space, and Recreation Element.

County of Orange Master Plan of Regional Riding and Hiking Trails

The County's trail plan provides policies and programs to develop and operate the future county-wide trails system. The Plan includes an inventory of existing/proposed trails, and standards and criteria for new trails.

County of Orange Recreation Element

The Recreation Element of the County General Plan provides an inventory of existing and proposed parks and open space and includes the Master Plan of Local Parks and Trails component.

County of Orange Resources Element

The County's Resources Element includes an inventory of county-wide resources such as agriculture, mineral, wildlife, energy, water, air, open space, and cultural-historic resources. The element also includes goals, policies, and programs for the development, management, preservation, and conservation of the county's resources.

SCOPE AND CONTENT

In addition to the introduction, the Conservation/Open Space/Recreation Element contains an inventory of existing resources, an issues identification section, goals and policies, and a plan. The existing conditions inventory provides the base information utilized to identify issues related to conservation and open space resources in the community. These issues lead to the formulation of goals and policies to guide the conservation and preservation of Cypress' natural resources. The Plan specifically explains how the goals and policies will be achieved and implemented.

RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS

All elements of a general plan must be internally consistent. This assumes a relationship between each element. the Conservation, Open Space, and Recreation (COSR) Element contains goals and policies which support goals and policies within each of the other elements.

The COSR Element relates to other elements in a variety of ways. The Land Use Element directly relates to the Element by designating areas of the City where open space/

recreational opportunities exist and by designating resources that should be conserved.

The COSR Element's relationship to the Housing Element is conditioned by the need to serve a growing population's recreational needs. Also, housing requirements for land must be balanced by the need to conserve natural resources.

Utilizing basic design standards, the Circulation Element designs plans for an efficient and well balanced circulation system. The COSR Element may establish some of the roadway landscaping standards, thereby supplementing the Circulation Element's guidelines.

The Public Safety Element relates to the COSR Element by designating areas within the City that are unsafe for development such as fault line areas and floodplains. Although these areas are unsafe for intensive development, such lands may be suitable for recreation and open space purposes. The open space resources preserved for the public health and safety are discussed in the COSR Element.

Similar to the Public Safety Element, the Noise Element relates to the COSR Element by discussing a health and safety issue area. Techniques for reducing noise often involve open space or some buffer zone between noise sources and noise-sensitive land uses.

The Growth Management Element accommodates growth at a slower rate which is more sensitive to the natural environment. Tiered growth patterns give a community the opportunity to plan open space networks and preserve natural resources.

The Air Quality Element and COSR Element are closely related because both are concerned with preserving or conserving natural resources. The Air Quality Element focuses on protecting the air from further contamination by reducing vehicle trips and source point emissions. The City of Cypress has elected to create a separate Air Quality Element to adequately address air quality issues confronting the community.

INVENTORY OF CONSERVATION RESOURCES

The following section inventories conservation resources in Cypress including water resources, biological resources, energy resources, solid waste reduction, land resources, and historical, archaeologic, and paleontologic resources. This inventory will provide the basis to identify issues to be addressed by the Element.

WATER RESOURCES

Water resources are diminishing throughout Southern California with increased development. As the native water supply decreases, the region's dependence on imported water grows. This section describes the quantity and quality of surface and groundwater resources within Cypress.

Surface Water

No naturally occurring permanent surface water features exist within Cypress. The Los Alamitos Racetrack in southwestern Cypress does, however, contain a number of manmade lakes. In addition, six storm drain channels--Moody Creek, Coyote Creek, 2A, Carbon Creek, Stanton Creek, and Bolsa Chica Creek -- intermittently carry water. Moody and Coyote Creek Channels provide drainage facilities for northern Cypress. The central portion of the community drains into 2A and Carbon Creek Channels. Drainage of the southern portion of Cypress is accommodated by the Stanton Creek and Bolsa Chica Channels.

Ground Water

The Southern California Water Company (SCWC) is responsible for water distribution in Cypress. Approximately 72 percent of Cypress' water use is obtained from the groundwater basin managed by the Orange County Water

District (OCWD). The remaining 28 percent of water is imported through the Municipal Water District of Orange County. Created by the State legislature in 1933, OCWD is responsible for maintaining the quantity and quality of ground water underlying Cypress and much of northern Orange County. The OCWD prevents local water companies from overdrafting the basin's water supply. Each jurisdiction is allowed to extract only 80 percent of their water needs from ground water. As Cypress is approaching its 80 percent cap, the City will become increasingly dependent on imported water.

Conservation of Water Resources

Southern California has suffered a severe drought during the 1980s and early 1990s and has had to import water to meet the growing demands of the region. The Metropolitan Water District imports water from the Colorado River via the Colorado River Aqueduct and from northern California via the State Water Project to obtain water supplies from sources outside of southern California.

In recognition of California's limited water supply, the Southern California Water company (SCWC) has created voluntary measures to promote water conservation in Cypress. Residents and businesses are urged not to hose down driveways, sidewalks, and other paved surfaces. Leaking plumbing fixtures should also be repaired. Other regulations involve limiting the hours of irrigation and encouraging irrigation efficiency to avoid water runoff.

BIOLOGICAL RESOURCES

Cypress began as an agricultural community in the early 1900s featuring row crops and citrus trees. During the same period, the dairy industry flourished, and the community soon became known as the "Dairy Capital of Southern California." However, like most of Orange County, almost all of Cypress' agricultural resources have since been converted to urban uses. Limited acreages of agricultural land remain in southern Cypress. However, the frequent cultivation and use

of pesticides and herbicides render this plant community unsuitable for permanent animal habitation.

Cypress is almost completely urbanized and landscaped with mostly non-native species. No known rare or endangered plant or animal species have been identified within the City. The community's most significant plant resources are its ornamentals. Businesses, residences, and the City grow a tremendous variety of non-native plants. Most yards and parks in Cypress contain grasses as groundcover and trees.

The urban landscaping within Cypress provides habitat for smaller rodents and birds. However, the frequent disruptions caused by urban activities and frequent cultivation of such plant life makes these plant communities less than ideal habitat for wild animals.

The Cypress Nature Park located between Denni Avenue and Los Alamitos Boulevard contains both native and non-native plants and is the City's most valuable habitat for plants and animals. Examples of native plants include the Toyon and Willow trees. Non-native examples are the Orange and Eucalyptus trees.

The City has identified a number of landmark trees within its jurisdiction. Many large and majestic trees were at one time contained on the large farms and dairies in Cypress. As development occurred in the community, many of these trees were lost.

Cypress has created an ordinance controlling the disposition of "Landmark Trees". The Ordinance prohibits any individual from cutting, destroying, or removing any landmark tree without a permit from the City Council. A permit is also required to prune, trim, or otherwise modify a landmark tree. In addition, no structures shall be constructed within 30 feet of any landmark tree unless the City Council approves a permit.

ENERGY RESOURCES

Limited supplies and environmental concerns of conventional energy resources, such as oil, electricity, and natural gas,

require their conservation. Domestic oil supplies continue to dwindle and has required the U.S. to become increasingly dependent on foreign oil imports. Though the current supply of electricity and natural gas are sufficient, there are disadvantages. First, expansion of the electrical supply may require additional nuclear facilities, thereby creating environmental pollution costs. Second, natural gas is a finite resource.

Given the area's warm climate, the most important alternative and renewable energy resource in Cypress is solar energy. This energy source has considerable potential and can be developed to substitute for oil, gas, and other energy supplies. Because of solar energy's ability to substitute for fossil fuels, it can be an important tool in the battle against air pollution.

Solar radiation in the form of sunlight can be utilized for energy production in two ways. The first method, active solar systems, involves the use of mechanical devices to convert solar energy to heat or electricity. The second, passive solar systems, utilizes natural heating and cooling from the sun through proper orientation and building design. The amount and quality of solar radiation received by Cypress is adequate for the use of solar technologies.

SOLID WASTE REDUCTION

Landfill sites throughout the State are nearing capacity. In Southern California, this is especially a problem because new landfill sites are hard to locate due to limited land resources.

In 1989, the State legislature passed AB 939, the California Integrated Waste Management Act. AB 939 requires all cities and counties within the State to prepare integrated waste management plans to attain solid waste reduction goals of 25 percent reduction by 1995 and 50 percent reduction by 2000. These plans are to include components for source reduction, recycling, and composting.

Cypress has recently prepared and adopted a source reduction and recycling element (SRRE). A description of the programs the City is considering to adopt in the final SRRE follows.

- Source reduction concentrates on eliminating waste before it is created. The City lobbies for state and federal legislation calling for less packaging or other pre-waste measures. On the local level, City personnel are directed to purchase products without excessive packaging. Other programs include land use/zoning modifications, public education, rate structure modification and onsite composting.
- Recycling focuses on retrieving goods that may be processed into new products. Curbside collection occurs at individual residences throughout Cypress. Collecting recyclable waste from multi-family developments and commercial and industrial uses requires waste haulers to sort waste to find recyclable goods. In addition, composting material may be retrieved through curbside collection to later be transferred to a regional processing facility. Another recycling option the City may consider are modifications to the building code, allowing new developments to contain both recycling and solid waste trash bins.
- The remaining methods, special and household hazardous waste collection, involve the City's cooperation with county programs. Items to be included in this special collection are household waste, tires, asbestos, and infectious waste.
- Ultimately, all of these programs rely on public education. Through printed materials, community outreach, mass media, and school programs the City plans on educating the public about source reduction, recycling, and composting.

Cypress generated 56,222 tons of solid waste in 1990, of which 4,959 tons was diverted through individual business and household efforts. The Draft SRRE anticipates that by 1995, 30.3 percent of waste will be diverted. By the year 2000, Cypress expects to divert 29,560 tons or 50 percent of its waste stream.

LAND RESOURCES

Cypress is an urban community with little vacant land left for development. The largest remaining acreages of undeveloped land are in the southern portion of the City, which are currently either vacant or utilized for agricultural production; all of these vacant lands are planned for business park development. The following section describes the City's land resources including the area's geology, soils, agricultural production, and mineral resources.

Geology

Cypress is composed of quaternary deposits of alluvium and colluvium. Alluvium results from sediments deposited from running water and colluvium forms as rock fragments and soil materials accumulate at the base of steep slopes.

Cypress' geologic structure does not include any active or potentially active faults. The City is, however, located in a seismically active region. The following five faults lie within close proximity to Cypress: Norwalk, El Modena, Whittier-Elsinore, Elysian, and Newport-Inglewood. In addition to these faults, the San Andreas Fault is situated approximately 45 miles north of Cypress. The San Andreas Fault is anticipated to deliver an 8.3 earthquake within the next thirty years. (For further discussion refer to the Safety Element.)

Soils

The following discussion is based on information contained in the Soil Survey of Orange County and Western Part of Riverside County conducted by the U.S. Soil Conservation Service. The U.S. Soil Conservation Service identifies a number of soils in Cypress. These soils include the San Emigdio Series, Metz Series, Hueneme Series and Bolsa Series, all of which are suitable for urban development.

San Emigdio Series: These soils are found throughout the northern and central portions of Cypress. They are nearly level and consist of well drained soils on floodplains and alluvial fans.

Metz Series: These soils are also nearly level. They include somewhat excessively drained sands on alluvial fans and flood plains. They are predominantly located in northeastern Cypress.

Hueneme Series: This series consists of poorly drained soils on alluvial fans and floodplains, which are located in northern Cypress.

Bolsa Series: The Bolsa Series consists of somewhat poorly drained soils on alluvial fans. These soils are situated in southern Cypress near the Los Alamitos Racetrack and Golf Course.

Agriculture Production Resources

Cypress was originally an agriculture and dairy community, featuring row crops and citrus trees. However, like much of Orange County, Cypress developed rapidly during the 1960s and 70s, and agricultural acreages were converted to urban uses. A few row crops (predominantly strawberries) remain in southern Cypress. This land is, however, planned and zoned for business park development.

Mineral Resources

The State Division of Mines and Geology identifies mineral resource areas throughout the State. According to the Geologic Map of Orange County showing Mines and Mineral Deposits, Cypress does not contain any mineral resources as defined.

HISTORIC, ARCHAEOLOGIC, AND PALEONTOLOGIC RESOURCES

An inventory of historic and cultural resources follows.

Historic Overview

The following historical overview of Cypress is summarized from a historical account presented in *A Thumbnail History of*

Cypress, California: 1565-1991. The entire region grew quickly in the 1880's leading to the creation of Orange County. In 1905, Waterville (now recognized as Cypress) responded to its growing population by creating an eight block subdivision. This area was bounded by Lincoln on the south, Crescent on the north, Walker on the east, and Watson on the west. During this time of economic and population growth, the Pacific Electric Railway passed through the community, providing a link to surrounding communities.

Accompanying the population boom, the community of Waterville supported a rural, yet diversified economy. The dairy industry became rooted in the community and the town was soon referred to as the "Dairy Capital of Southern California." Meanwhile, with innovations in irrigation, the citrus industry also flourished, and a mill producing sorghum (grass cultivated as a grain) located within the community.

Waterville, named after its artesian wells, became known as Cypress in 1927. The name was chosen because of the long established Cypress School District. Cypress had supplanted Waterville as the preferred site name.

World War II brought a new kind of growth to the areas surrounding Cypress. Military installations in Los Alamitos, Seal Beach, El Toro, and Irvine created many jobs desperately needed after the Depression. Many individuals traveled to these locations to be involved with the military effort. Meanwhile, workers were needed desperately to man the fields. German prisoners of war and Mexicans were brought in to cultivate the fields.

After World War II, rural industries once again flourished in Cypress. Dairymen looking for land not threatened by the growing urbanization pressures of Los Angeles moved to Cypress. The dairymen of Cypress decided to incorporate to protect their lifestyle from encroaching development. However, the dairymen sold their property as Cypress gradually changed from an agrarian to bedroom community for Los Angeles.

Historic Resources: A record search was conducted by the Regional Information Center at UCLA on November 1, 1991. The record search was negative for any recorded prehistoric or historic sites. The search also focused on review of maps

dating from 1896, 1942, and 1943. The maps showed extensive development commencing in the period between 1896 and 1942. There are no National Register listed or eligible properties or State Landmarks in the City. The only survey which has been conducted was done by Archaeological Associates (Van Horn 1978) for a parking lot at Cypress College. Van Horn's survey was negative.

Archaeologic and Paleontologic Resources

A report, **The Record and Literature Search for the City of Cypress**, was prepared to identify cultural resources in the community for the Cypress General Plan Update. The following analysis is from that document.

Cultural History: When dealing with a cultural history for Southern California, it is important to view the prehistoric and ethnographic periods for the range of human occupation. Three main sequences for prehistoric through European contact occupation have been worked out by William Wallace (1971; 1978), and Claude Warren (1961). Wallace originally published his chronology in 1955, and it was reprinted in 1971 (Wallace 1971:186-201). The sequence that more adequately addresses the principal transitional aspects is Wallace's configuration published in 1978. Wallace (1971) and Warren (1961) sequences were constructed to encompass Coastal Southern California, which includes: Santa Barbara, Ventura, Orange, non-desert Los Angeles, and San Diego Counties as well as the Channel Islands; San Nicolas, Santa Catalina, San Clemente, and Santa Barbara (Wallace 1971:186; Bean and Smith 1978). The Southern California province runs from Point Conception in the north to the Mexican border. Locally, the Gabrielino Indians inhabited an area that stretched from between Topanga and Malibu to Aliso Creek in Orange County, inland to the desert, and the southern Channel Islands.

Early Man Horizon or San Diegito Tradition: The key feature of this period is the near absence of seed grinding implements. The subsistence revolved around hunting. The type of artifacts that are usually associated with this horizon are flake knives, leaf-shaped projectile points, flake scrapers, hammerstones, eccentric crescentrics, and atlatl spurs.

Millingstone Horizon or Encinitas Tradition: The economy did a reverse turn in this horizon; hunting and fishing became secondary in importance behind plant food, specifically seed-gathering. Wallace proposed a model to account for this transitional state. He determined that a warming trend dried up the interior lakes driving the inhabitants towards the more moderate coastal areas (1978:28). Wallace speculates that a seed-gathering people from the Great Basin brought the different subsistence mode with them to the coastal regions. He observed that a thinning of inland populations supports this theory.

This period has a distinct paucity of projectile points. The ones that are found are leaf-shaped, atlatl and dart pints, and an abundance of milling equipment, usually manos and metates. In addition, the basic artifact assemblages included cog stones, crude core and flake tools, and simple polished charmstones (Wallace 1978). There is also a tendency towards sedentism as typified by the size and depth of some coastal sites. During this period sites are typically situated on bluffs above the shoreline. The Diablo Canyon investigations in San Luis Obispo County (Greenwood 1972) and recent work in Santa Barbara County (Colten 1978; Erlandson 1988) reveal a greater reliance on marine resources than previously thought.

Intermediate Horizon or Campbell Tradition: This horizon generally reflected a return to a reliance on hunting. However in the Los Angeles area there was still a strong emphasis on seed grinding, indicating a slower movement from the previous millingstone horizon than in neighboring areas (Wallace 1978:30). Mortars and pestles came into importance during this period. These implements were mainly used for acorn processing, reflecting the invention of a leaching process for acorns and an emphasis on the food source. Projectile points were still large leaf-shaped points with a few smaller points present. At some point in this horizon the bow and arrow were adopted but were not heavily represented. Otherwise technological changes are not especially appreciable.

Late Prehistoric Horizon or Shoshonean Tradition: The distinctive feature of this horizon is the Shoshonean incursion into the area about 500 A.D., when Shoshonean speakers began to replace Hokan-speaking tribes. Following this influx

of new people, the tribal landscape in the Southern California coastal regions was altered by differentiation of tribes into the discrete cultural groups that were present at the time of European contact (Johnston 1962; Wallace 1971:195). There were important technological and social developments in this period. These include the increased use of the bow and arrow, circular shell fishhooks, canoes, perforated stones, ceramic vessels in the south, trade networks, elaborate art, sedentary village life, and distinctive mortuary customs. Population growth led to larger villages, and there was a concomitant increase in food resource exploitation.

Local Ethnohistory: Bean and Smith (1978:540 citing Kroeber 1925) believe the level of Gabrielino culture that was encountered by the Spanish in the eighteenth century was a continuation of a culture formation originating as far back as 1200 A.D. Prior to Spanish contact, the Gabrielino population was in excess of 5,000. Various Spanish explorers had been in the region earlier, but in 1769, the Spanish under Gaspar de Portola began their colonization of the region. The Gabrielino had been friendly to the Spanish before that, but soon changed their attitude. They were named by the Franciscan Priests from their association with the Mission San Gabriel Arcangel that was constructed by 1771. As a result of their induction into the mission, the Gabrielino population was decimated through disease and culture shock and ceased to exist as a cultural entity.

The bulk of knowledge that we have concerning Gabrielino culture is from the remains of their material culture. Unfortunately, much of it was perishable and therefore not available for research purposes. We do know they had abundant marine resources, as well as terrestrial animals with heavy reliance on acorns. They also engaged in trade networks that included the exchange of resources from the Channel Islands, the mainland and inland to Arizona. Over 89 percent of the Gabrielino's physical environment was within the extremely rich Sonoran life zone (Bean and Smith 1978).

During construction of the Cypress Library in 1965, a skeleton was found. The skeleton was identified by a Dr. Polk from Compton College. In a news clipping from the Long Beach Press Telegram, Dr. Polk stated that the skeleton was Chumash. He claimed that this burial was proof that the

Chumash came down the coast in canoes on hunting ventures (Johnson 1991).

**TABLE COSR-1
REGIONAL NATIVE AMERICAN CHRONOLOGY**

Wallace (1978)	Wallace (1971)	Warren (1961)
	Historic - A.D. 1800-	
	Horizon IV Late Prehistoric A.D. 1000 to A.D. 1800	Shoshonean Tradition A.D. 500 to European Contact
	Horizon III Intermediate 1000 B.C. to A.D. 1000	Campbell Tradition 1000 B.C. to A.D. 1
Period III Diversified Subsistence 3000 to 2000 B.C.	Horizon II Millingstone 5500 to 1000 B.C.	Encinitas Tradition 5500 B.C. to A.D. 1
Period II Food Collecting 6000 - 3000 B.C.	Horizon I Early Man (?) to 5500 B.C.	San Diegito Tradition (?) to 5500 B.C.
Period I Hunting 9000 - 6000 B.C.		

Sources: William Wallace, *The California Indians: a Sourcebook*, 1971.
William Wallace, *California*, 1978.
Claude Warren, *Eastern New Mexico University Contributions in Anthropology*, 1961.

INVENTORY OF OPEN SPACE AND RECREATION RESOURCES

Cypress' open space and recreation resources include parks, schools, community facilities, and privately owned recreation facilities. Combined these resources offer the community's residents a number of recreational opportunities. These resources are described in the following section.

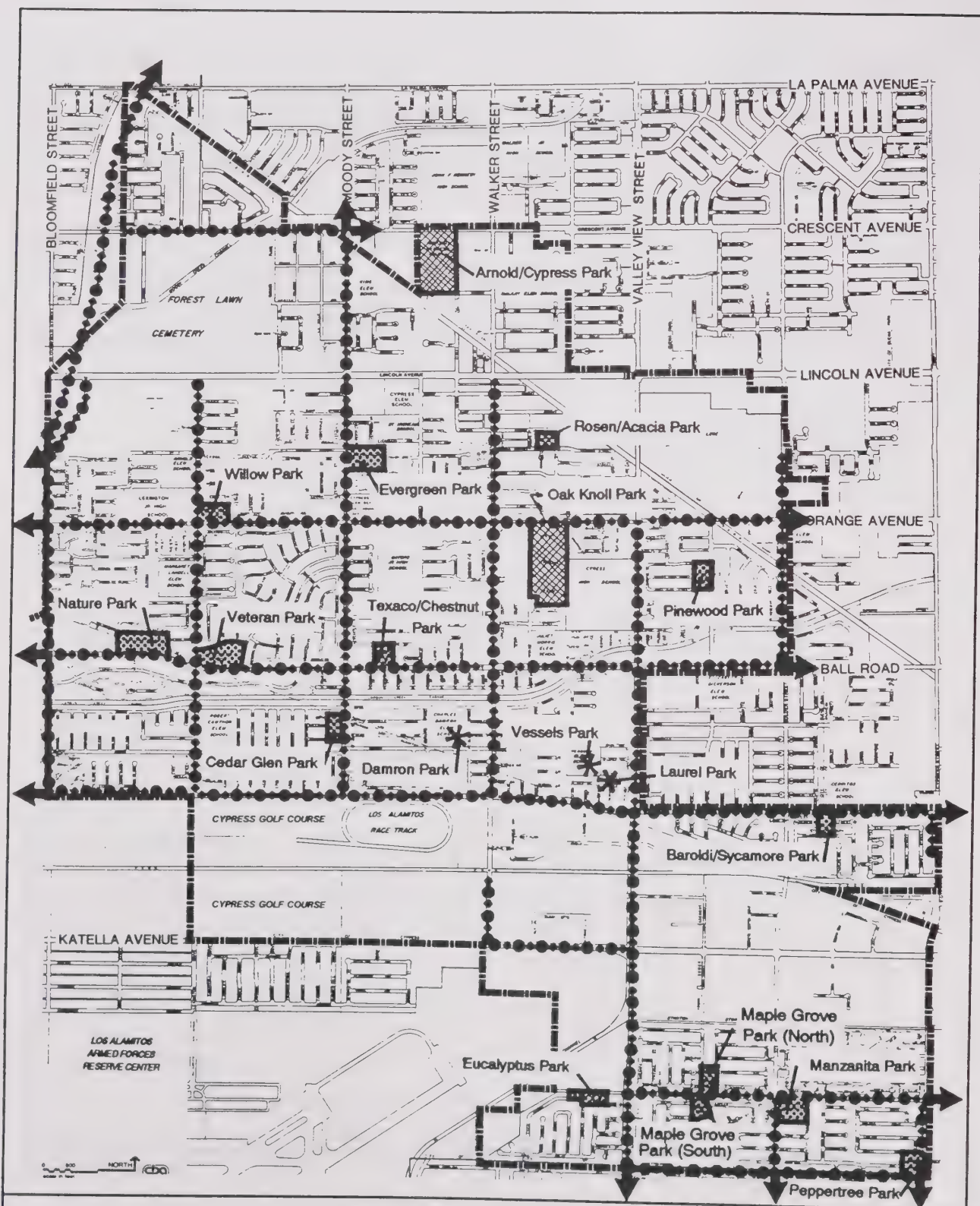
RECREATION FACILITIES INVENTORY





The City of Cypress Parks and Recreation District operates 19 park sites encompassing approximately 78 acres. (See Figure COSR-1.) The City classifies parks as community, neighborhood, or mini facilities based on size. Each park classification has a general area of service and typical park facilities, as described in Table COSR-2.

**TABLE COSR-2
CYPRESS PARK STANDARDS**

Park Type	Typical Minimum Size	Service Area	Typical Facilities
Community	10 acres	1 - 1-1/2 miles	Athletic fields, picnic areas, community centers
Neighborhood	3-5 acres	1/2 mile	Tot lots, public facilities, multi-use court
Mini	less than 1 acre	1/4 mile	Tot lot, open space

Source: City of Cypress Recreation District.



- | | | | |
|---|-------------------|---|---------|
|  | Community Park |  | Bikeway |
|  | Neighborhood Park | | |
|  | Mini-Park | | |

SOURCE: Cypress Department of Public Works

CYPRESS
GENERAL PLAN
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Figure COSR-1
Existing Recreation Facilities

Community Parks

A community park serves neighborhoods within one to one and one-half miles of the site and generally encompasses over ten acres. Both active and passive uses are generally provided at these parks, offering recreation opportunities for large groups of people. Field sports, individual and group picnicking, play areas, and community centers are commonly found at these large parks.

Cypress contains two community park facilities - Arnold/Cypress Park and Oak Knoll Park, encompassing approximately 14 and 21 acres respectively. Both parks include a variety of facilities, listed in Table COSR-3. Arnold/Cypress Park offers active recreation opportunities at ball fields, volleyball courts, and playground facilities. This park also includes a multi-purpose room available for public use that can accommodate 75+ individuals. Oak Knoll Park additionally offers a number of active recreation opportunities and includes sports fields and courts, and an exercise course. Cypress' 18,000 square foot Community Center is located in Oak Knoll Park.

Neighborhood Parks

Neighborhood parks are typically smaller in size than community parks, generally covering three to five acres. The park serves the immediate neighborhood within one-half mile walking distance or a population ranging between 2,500 and 5,000. Many neighborhood parks are located adjacent to elementary schools to benefit from the additional open space acreage available at school sites. These parks normally include tot lots, picnic facilities, and a multi-use court.

Cypress has fourteen neighborhood parks, contributing approximately 45 acres to the City's recreation/ open space land. This includes the City's most recently completed park site, the 6.3 acre Veteran's Park, which was developed as part of the Sorrento Homes project. Table COSR-3 outlines the facilities available at the City's neighborhood parks.

Table COSR-3 City of Cypress Existing Recreational Facilities

			FACILITIES													
			Community Room(s)	Baseball Field	Softball Field	Football Field	Volleyball Court	Picnic Facilities	Tot Lot	Multi-use Court	Exercise Course	Wading Pool	Horseshoe Pit	Shade Shelter	Nature Facility	Basketball Court
Community Parks	Arnold/Cypress Park	13.64	●		●		●	●	●	●		●	●			
	Oak Knoll Park	20.97	●	●	●	●	●	●	●		●					
	Baroldi/Sycamore Park	1.20							●	●				●		
Neighborhood Parks	Cedar Glen	2.96	●					●	●							
	Eucalyptus	2.19	●					●	●	●			●	●		
	Evergreen	2.98						●	●							
	Manzanita	4.05						●	●	●				●		
	Maple Grove North	3.14						●	●	●				●		
	Maple Grove South	1.86						●	●	●				●		
	Peppertree	2.61						●	●	●				●		
	Pinewood	2.41						●	●	●						
	Rosen/Acacia	1.31						●	●					●		
	Texaco/Chestnut	1.98	●				●	●	●					●		
	Willow	3.71						●	●				●	●		
	Nature Park	5.75						●							●	
	Veteran	6.30	○				●	●	●							●
	Mini-Parks	Damron	0.46													
Laurel		0.25														
Vessels		0.63														
Total Park Acreage		78.40														

● Existing Facility

○ Proposed Facility

The Cypress Nature Park is a unique neighborhood park in that it is a passive nature facility which also serves as a flood control retention basin. Some of the City's most significant native and non-native plants and animals are located in the Nature Park.

Mini-Parks

Mini-parks encompass less than one acre of land and are usually located near schools, residential developments, or downtown areas. Mini-parks in Cypress are owned by the Cypress Elementary School District, while the Cypress Parks and Recreation District owns and maintains mini-park equipment. These sites serve as playgrounds for children or as a place for workers to relax in an urbanized environment. Cypress has three mini park sites.

Schools

The City also has access to recreational facilities at twelve school sites, contributing an additional 113 acres to the City's open space and recreation resources (refer to Table COSR-4). School sites are available for public recreational use after school hours and on weekends. During school hours, only students can occupy the school premises.

Two elementary schools in Cypress, Landell and MacKay, and the Oxford Junior High School are currently closed. The Cypress Elementary School District has submitted plans to the State to rehabilitate Landell School. The School District anticipates that Landell School will re-open in September of 1993 as an elementary school facility.

The MacKay School site is also closed. The School District currently leases the property to the Head Start Program. Despite the "closed" status of these elementary school sites, City residents are able to utilize the open space land.

Oxford Junior High School currently is leased to a private Christian school, and the lease must be renewed annually. During school hours, the school facility and adjoining open space are available only to the Christian school. However, Cypress Parks and Recreation District does schedule youth sport leagues during off-school hours at Oxford Junior High School.

**TABLE COSR-4
CITY OF CYPRESS
SCHOOL FACILITIES**

	Acreage	
	Total	Open Space
Anaheim School District:		
Cypress High	37.76	21.89
Lexington Jr. High	18.43	13.30
Oxford Jr. High (closed)	22.10	16.33
Cypress Elementary School District:		
Arnold Elementary	9.12	6.55
Cawthon, Robert Elementary	9.19	6.18
Damron, Charles Elementary	8.95	6.17
King Elementary	12.32	6.85
Landell, Margaret Elementary (closed)	9.98	7.25
MacKay, Daniel Elementary (closed)	9.70	7.44
Morris, Juliet Elementary	8.79	7.86
Swain, Christine Elementary	8.83	6.11
Vessels, Mildred Elementary	<u>9.84</u>	<u>7.27</u>
Total	165.01	113.20

Source: City of Cypress General Plan, 1986

In addition to these schools, Cypress Community College contains 93 acres of open space (inclusive of parking) and includes large playing fields, a running track, tennis courts, swimming pool, and handball courts among its recreational facilities. Cypress College is part of the North Orange County Community College District, and permits public use of its facilities during specified hours by reservation. Fees are charged for use of certain facilities, such as reservation of playing fields for organized practices.

Bike Paths

Bicycle trails provide access to schools, parks, and other open space areas within a community. An inventory of existing and proposed bicycle paths are included in Figure COSR-1. The trail system includes Class I, II, and III paths. Class I bike paths are separate from the street and are the highest quality bike path. Class II and III are both located on the street. Class II paths include a designated bike lane and Class III paths are only marked by a sign.

RECREATION PROGRAMS

Cypress has a number of facilities and programs that supplement the City's recreation resources. The City coordinates with many groups to provide these recreational programs to Cypress residents. Programs include sports activities, youth services, classes/cultural arts, and senior citizen/human services. A schedule of recreation classes is published quarterly by the Cypress Recreation and Park District listing classes that are available.

The Cultural Arts Commission and the Friends of Cypress Cultural Arts (FOCCA) are dedicated to improving cultural arts in the City. The Cultural Arts Commission operates as an advisory commission to the City Council. In addition to the commission's advisory role, they sponsor a number of programs including an Arts Week, Summer Concert, Holiday Home Decorating Contest, and various excursions. The efforts of the Cypress Arts Commission and Recreation and Park District are supported by FOCCA through fundraising and promoting participation in community arts programs.

COMMUNITY FACILITIES

Community facilities host many of the City's recreation and cultural programs. A description of the predominant facilities and associated programs within Cypress follows.

Community Center

The Cypress Community Center is located in Oak Knoll Park, and is 18,000 square feet in size. A number of activities including art, exercise, etiquette, and special festivities such as Oktoberfest are regularly held at the Community Center. In addition, the facility is serving temporarily as the City's senior center. The Center is also available for private rentals (wedding receptions, etc.) on weekends. According to the Parks and Recreation District, the Community Center is actively utilized and reservations must be made well in advance for City activities and private rental.

To satisfy the City's growing demand for community facilities, the Parks and Recreation District is considering building a second center at Veteran Park. Plans for the Veteran Park center include a dance studio, gym, and meeting rooms.

Civic Center

The Civic Center is located in the center of the City and is surrounded by expanses of landscaped open space. Facilities located at the Civic Center include City Hall, council chambers, city police department, a library, and tennis courts.

The open space serves as visual relief from the urban environment and also functions as a place for recreational programs. Some programs, including folk dancing, are scheduled around the Civic Center.

In addition, the Cypress branch of the Orange County Library, containing approximately 90,000 volumes, also sponsors a number of programs, including Pre-School Storytime and the Fun Club for Children.

Senior Center

The Senior Center is temporarily located at the Cypress Community Center during the construction of a new center. The City has acquired the closed Cypress School site on Grindley Street, a portion of which will be used to build a new senior center. Construction of the senior center began in Spring 1992.

The City offers a variety of programs through the Senior Center to address the needs of senior citizens. The facility serves lunch on weekdays for a \$1.75 donation and provides home meals for those seniors that are physically impaired. Shopping assistance is also available on a weekly basis and food is distributed to low income seniors monthly through the Commodity Distribution Program.

Three types of health care services are available to seniors at the Senior Center. An elder care nurse conducts health screening monthly. According to the Senior Center, there is no waiting list for the program; however, seniors wanting to

see the nurse must sign-up one month in advance. Secondly, there is a bi-monthly blood pressure clinic. Thirdly, the Health Insurance Counseling Advocacy Program (HICAP) sends a representative to the Center to answer seniors' questions about Medicare, Medical, and other insurances.

A number of educational and social opportunities are available for Cypress' seniors, including ceramics, needlepoint, physical fitness, bingo, bowling, and dancing. In addition, both the Cypress Sunshine Club and Cypress Senior Citizen Club meet weekly to conduct club business and host socials.

Cultural Arts Center

The closed Oxford Junior High School currently serves as the City's Cultural Arts Center. The City has recently distributed requests for proposals for companies to conduct an arts assessment. The assessment will examine all aspects of the Cypress' cultural arts program.

The Cypress Civic Theatre Guild, a private organization, coordinates six theatre performances annually. The City supports the theatre by allowing the Guild to utilize the cultural arts facility at no cost. Though the City does not directly fund the theatre, Cypress loans the group funds to produce their plays.

A number of other programs and events are hosted by the Cultural Arts Center. Classes in the arts are conducted at the Center, including art and music classes. Other community events, such as Celebrate the Arts Week, Art in the Park, Juried Art Exhibit, and the Elementary Art Program are sponsored by the Center.

Community Art Gallery

The Community Art Gallery is located in the public areas of City Hall. A number of displays are shown throughout the year and are sponsored by the Parks and Recreation District.

REGIONAL PARKS

A regional park typically serves several communities and contains substantially more acreage than parks in individual communities. Regional parks have a variety of recreation facilities including golf courses, a lake for boating, swimming facilities, and both winter and summer sports centers.

While there are no regional park facilities within Cypress, nearby jurisdictions operate a number of regional recreational facilities. Five regional parks within close proximity to Cypress are El Dorado Park/Nature Center, Heartwell Park, Cerritos Park, River Park, and El Rancho Verde Park and Bicycle Path. El Dorado Park in Long Beach includes four fishing lakes, an archery course, five miles of biking/walking trails and picnic facilities. The adjoining Nature Center includes two lakes (no fishing), trails, and a small museum. Heartwell Park, also situated in Long Beach, is a more active park with ball fields, soccer fields, tennis courts, basketball and volleyball facilities. Adjacent to both the El Dorado and Heartwell Parks are public golf courses.

Other nearby regional park facilities include Cerritos Regional Park (84 acres), River Park (55 acres adjacent to the San Gabriel River north of Lincoln Avenue), El Rancho Verde Park and Bicycle Path, a 12 mile strip park running through the communities of La Palma and Buena Park. Two public golf courses, Old Ranch Country Club and "Dad" Miller Public Golf Course, are located in Seal Beach and Anaheim, respectively.

PRIVATE FACILITIES

In addition to public facilities, several private recreational facilities in Cypress contribute to open/recreational resources within the community.

Commercial/Industrial Open Space Facilities

Many companies provide on-site recreation and open space areas for employees to promote the employee's well being.

The Cypress Business Park contains a number of large businesses, some of which offer indoor recreational facilities, or outdoor open space areas with informal seating which offer a place for workers to relax. The City will continue to encourage developers to provide on-site recreation and open space facilities.

Commercial Recreation

Cypress includes three private commercial recreation uses in its jurisdiction: the Cypress Golf Club, the Los Alamitos Racetrack, and the Navy Golf Course.

- The Cypress Golf Club is a 106 acre private golf course, located in the southwestern portion of the City. As part of the Cypress Business and Professional Center Specific Plan (1991), the golf course is undergoing major improvements with the intent of attaining PGA status. The upgraded facility will include an 18-hole course, five-acre practice range, and club house. The clubhouse is a two level, 25,000 square foot facility and will house administrative offices, a lounge, a pro shop, and a restaurant.
- Los Alamitos Racetrack, adjacent to the Los Alamitos Golf Course, is home to quarter horse and harness racing and is visited by over one and one-half million people annually. As the only commercial racetrack facility in Orange County, Los Alamitos functions as a significant regional recreation resource and as a major income generator for the City.
- A portion of the Navy Golf Course is positioned in southern Cypress and is available for military personnel and relatives to utilize.

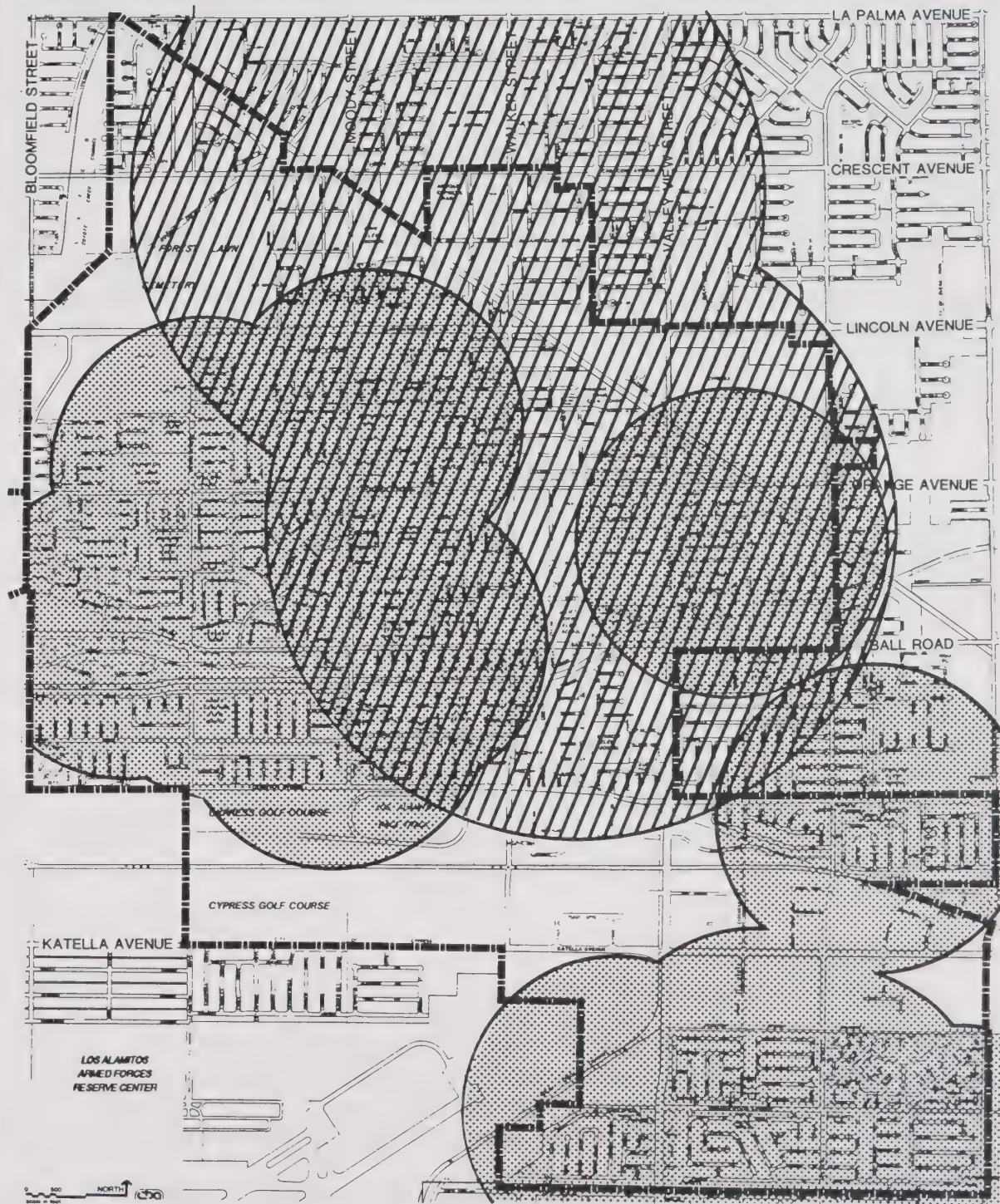
Cemetery

- Forest Lawn Cemetery serves as the western entrance to the City along Lincoln Avenue. Forest Lawn's 150 acres of rolling green lawns serve as visual relief from the surrounding urbanized area. In addition, people utilize the area daily for quiet strolls and private reflection.

EVALUATION OF EXISTING CONDITIONS

Cypress' recreation facilities and programs offer the community's residents diverse recreational opportunities. The City operates 78 acres of park space, utilizes 113 acres of school open space land, as well as numerous other community facilities. The City has adopted national standards for evaluating the park and open space land per 1,000 City residents. This standard, four and one-half acres per 1,000 residents, designates three acres for City parks and the remaining one and one-half as open space at school sites. The 113 acres of school open space land satisfies the standard; however, the City's park acreage falls 50 acres short of park land.

Despite the deficiency, park land is fairly well distributed throughout the City of Cypress (see Figure COSR-2). Each park classification has a related service area based on the size of the park. Park service areas include: one mile radius for a community park, half mile radius for a neighborhood park, and a one quarter mile radius for a mini-park. According to these standards, almost all of Cypress' residential neighborhoods are well served by parkland. However, the Cypress Business Park is not adequately served by park facilities. Also, a small area in northwestern Cypress is not included within a park service area.



Community Park Service Area (Service Radius of 1 mile)



Neighborhood Park Service Area (Service Radius of 0.5 mile)

SOURCE: Cotton/Beland/Associates, Inc.

CYPRESS
GENERAL PLAN
UPDATE

Figure COSR-2
Park Service Areas

CONSERVATION/OPEN SPACE/RECREATION ISSUE IDENTIFICATION

The previous inventories of conservation, open space and recreation resources identified a number of issues relevant to Cypress. These issues are summarized in the following section and provide the basis for the development of the Element's goals and policies.

WATER RESOURCES

- Southern California is continuing to experience a drought. Despite the Orange County Water District's extensive management practices, substantial overdraft of the groundwater basin continues. The availability of water is vital to Southern California's water intensive lifestyle.
- New development in Cypress will increase the demand on limited water resources. While the majority of water is extracted from local groundwater supplies, there are limits on the amount of additional water that can be taken from the basin. Water conservation is, thus, essential to preserve the groundwater table and minimize dependence on imported water supplies.

BIOLOGICAL RESOURCES

- Cypress has been extensively urbanized over time. As a result, preservation of the limited remaining habitat is important. Ornamental plants are found throughout Cypress in the landscape designs of homes and businesses.
- The City's landmark trees are scattered throughout Cypress. These majestic trees are reminiscent of the City's farming days when many of them were planted. The landmark trees are a unique vegetative resource in Cypress.

ENERGY RESOURCES

- Cypress' population and business community are growing, placing additional demands on energy resources, including fossil fuels. Conservation of these resources through land use planning and development of alternative energy forms is important to the region's environmental quality.

SOLID WASTE REDUCTION

- Available landfill space is quickly diminishing. It is essential that the City adopt and implement source reduction and recycling programs to minimize the production of solid waste.

HISTORIC, ARCHAEOLOGIC, AND PALEONTOLOGIC RESOURCES

- Archaeological and paleontological resources assist humankind in understanding their history and the history of the world in which they live. Although there are no known archaeological or paleontological resources located in Cypress, methods of protecting new resources that may be discovered, while permitting development must be addressed.

PARK FACILITIES

- Based on the City's adopted park standards, the current park system falls short of providing enough acreage for City residents. The City will need to identify additional park sites and/or augment existing facilities or programs to address this shortfall.
- While there is a strong desire by community residents for expanded senior activities, cultural arts/theatre center, public swimming pool, and other facilities, funding sources for these items is extremely limited. Additional funding sources will need to be explored.

- Parks are fairly evenly distributed throughout Cypress, creating a well dispersed park system. The exception is the Cypress Business Park which does not lie within the service area of any park. In addition, portions of northwestern Cypress are not within the service radius of any parks.
- Limited land is available for new parks or the expansion of existing parks. Approximately two percent of the City's land area is currently undeveloped. The majority of vacant land is located in the business park.
- Increased employment in the business park may increase demand for open space and park facilities in the area. The additional daytime population in Cypress will likely require open space and recreation facilities, or at least access to such facilities.

OPEN SPACE

- The Cypress Golf Club, Los Alamitos Race Track, and the Forest Lawn Cemetery are privately owned facilities which provide visual relief from the urban environment and are valuable open space resources.
- As the City of Cypress, and especially the business park, continues to grow, the community's density will increase. Open space areas will serve as visual relief from the urban environment and can also provide recreational opportunities.
- Flood control facilities, including Nature Park, protect the public from possible flooding hazards.

CONSERVATION/OPEN SPACE/RECREATION GOALS AND POLICIES

The goals and supporting policies contained in this Element focus on ensuring that the City's natural resources are preserved, and that adequate park and recreation facilities continue to be available to City residents.

WATER RESOURCES

Water conservation should be a continual effort within Cypress because of the region's dependence on imported water supplies. The City will coordinate its efforts with the Southern California Water Company and Orange County Water District to develop water conservation strategies.

GOAL 1: Conserve ground water and imported water resources.

Policy 1.1: Pursue agreements with Southern California Water Company and Orange County Water District to design and implement water conservation measures.

Policy 1.2: Promote the use of native trees in landscaping to conserve water resources.

Policy 1.3: Protect groundwater resources from depletion and sources of pollution.

Policy 1.4: Conserve imported water by utilizing water conservation techniques, water conserving appliances, and drought-resistant landscaping.

Policy 1.5: Support the expansion of reclaimed water production and use wherever possible and economically feasible.

BIOLOGICAL RESOURCES

Biological resources in Cypress are primarily limited to landscaping plants and trees and animals that have adapted to the urban environment. However, in the southern portion of Cypress, some agricultural land remains. All vacant land in this area is planned for business park development.

GOAL 2: Preserve the few remaining native plant and animal species and the non-native plants utilized in landscaping throughout the City.

Policy 2.1: Enforce the Landmark Tree Ordinance which prohibits destroying or pruning landmark trees without a permit.

Policy 2.2: Prohibit the construction of any structure within 30 feet of any landmark tree.

Policy 2.3: Provide for the consistent use of street trees along all sidewalks and property frontages.

Policy 2.4: Provide the opportunity to continue using land for agricultural crops as an interim use prior to further development.

ENERGY RESOURCES

As Cypress continues to develop, the community will require additional energy resources. New development in Cypress will consume additional electricity and fossil fuel resources. To minimize the demands on these resources, the following goal and policies intend to limit energy consumption.

GOAL 3: Conserve energy resources through the use of available technology and conservation practices.

Policy 3.1: Encourage innovative site planning and building designs that minimize energy consumption by taking advantage of sun/shade patterns, prevailing winds, landscaping, and building materials.

Policy 3.2: Encourage new development and existing structures to install energy saving features.

SOLID WASTE REDUCTION

As landfills rapidly reach their capacities and new landfills become increasingly more difficult to establish, the need to reduce solid waste generation is critical. Local jurisdictions are now required by State Law (AB 939) to reduce solid waste within their boundaries, thereby decreasing the rate that landfills are filled.

GOAL 4: Reduce solid waste produced in the City.

Policy 4.1: Complete, adopt, and implement a Source Reduction and Recycling Element as required by State legislation.

Policy 4.2: Achieve 25 percent source reduction by 1995 and 50 percent reduction by 2000 as mandated by AB 939.

Policy 4.3: Maximize public awareness of all source reduction programs, including opportunities for community feedback and school education.

Policy 4.4: Maximize integration of all source reduction programs.

Policy 4.5: Encourage composting as an alternative to disposal for organic wastes.

Policy 4.6: Coordinate with the County and surrounding jurisdictions to dispose of special waste including tire shredding, asbestos, household hazardous waste and infectious waste.

HISTORIC, ARCHAEOLOGIC, AND PALEONTOLOGIC RESOURCES

No historic, archaeologic, or paleontologic resources are known currently (1992) to exist in Cypress. (See the Inventory of Conservation Resources Section). New resources

may, however, be discovered in the future, considering the number of resources which have been discovered in the Southern California region.

GOAL 5: Preserve Cypress' archaeological and paleontologic resources.

Policy 5.1: Update at regular intervals records of resource finds and locations.

Policy 5.2: Prior to development in previously undeveloped areas, require strict adherence to CEQA guidelines for environmental documentation and mitigation measures where development will affect archaeological or paleontological resources.

PARK FACILITIES

The City of Cypress needs to provide recreation facilities and programs for all groups (seniors, children, etc.) within the community, despite financing and locational constraints. Concurrently, new development places additional demands on existing facilities, requiring the creation and expansion of recreation opportunities.

GOAL 6: Provide recreation/park facilities and programs for all those who live and work in Cypress.

Policy 6.1: Continue to require new developments to provide recreational opportunities for their residents in accordance with the City's park standard, three acres of parkland per 1,000 residents.

Policy 6.2: Preserve existing recreational and park facilities, and develop new park and recreational facilities and/or programs as necessary to maintain an adequate level of service and a wide variety of programs.

Policy 6.3: Maximize the recreational opportunities offered by existing open space and recreation resources so that they serve the greatest portion of the community.

Policy 6.4: Where feasible, community, neighborhood and mini-parks should be located adjacent to school sites, but the prime locational criterion will be how well local neighborhoods are served.

Policy 6.5: Continually reassess the community's recreational and open space standards and opportunities in relation to satisfying the needs of the population.

Policy 6.6: Design new and renovated parks for convenient and accessible use by handicapped elderly, and otherwise less mobile persons within the community.

Policy 6.7: Evaluate and, where feasible, utilize for low-maintenance greenbelts and multi-use trails, the opportunities offered by abandoned road and railroad rights-of-way, and similar environmentally impacted or unused linear open space.

Policy 6.8: Preserve public and private open space lands for active and passive recreational opportunities.

Policy 6.9: Continue to cooperate with the Anaheim Union High School and Cypress Elementary School Districts for the maximum feasible use of public facilities to meet recreational needs. In addition, pursue joint-use agreements with Cypress College.

Policy 6.10: Encourage all future public neighborhood and community parks in the City to be designed as joint-use facilities contiguous with public schools and sharing playfields, playgrounds, and other amenities wherever possible.

Policy 6.11: Encourage and, where appropriate, require the inclusion of recreation facilities and open space within future residential, industrial and commercial developments.

Policy 6.12: Implement mechanisms to cause developments in Cypress to include recreation, cultural, open space facilities and improvements by the dedication of land or property for such purposes, or the payment of contributions (exactions) to the City for the provision and preservation of such amenities.

GOAL 7: Provide a range of informal opportunities and organized recreational, cultural, sports, and life enrichment programs and services which will enable community residents of all ages, interests, and abilities to participate and experience self-satisfaction, personal growth, and fulfillment in leisure activities.

Policy 7.1: Continue to work closely with various appointed citizen groups and service organizations to help assure that the City's recreation program meets the community's needs in the breadth and quantity of programs offered.

Policy 7.2: Work closely with other public agencies, including other parks and recreation departments and school districts, in developing cooperative park and recreation programs.

Policy 7.3: Work closely with private employers to develop and finance the costs of joint recreational programs and facilities for those working in Cypress.

Policy 7.4: Provide as wide a range of recreational opportunities as possible, including athletics, arts, crafts, and cultural arts programs and facilities for all ages and interest groups.

Policy 7.5: Ensure that parks and recreation facilities are developed with facilities appropriate to all ages, including athletic fields, active play areas, passive open space, tot lots and picnic areas.

Policy 7.6: Develop long-term agreements with the School District and, as appropriate, other agencies that will maximize joint-use and multiple-use of facilities, eliminate program uncertainty, and reduce overall operations and maintenance costs.

Policy 7.7: Provide appropriate recreation programs and park facilities for those with specialized needs including senior citizens and the handicapped.

OPEN SPACE

Open space resources in Cypress provide visual relief from the City's urban uses and protect the public safety and welfare. As population densities increase in Cypress, preservation of the remaining open space resources will become increasingly important.

GOAL 8: Preserve open space resources in Cypress to maintain the high quality of life in Cypress.

Policy 8.1: Continue to ensure that adequate useable private open space is provided in residential developments, and that such areas are maintained as open space in perpetuity.

Policy 8.2: Promote visually pleasing landscaped corridors and a sense of spaciousness throughout the community.

Policy 8.3: Reinforce a sense of form and positive civic image by preserving older trees where possible, by requiring integrated landscaping plans within areas of newer development, and by providing bicycle trails that link cultural, educational, civic, and recreational uses.

Policy 8.4: Encourage individual school sites to maintain open space areas.

GOAL 9: Promote the preservation of the Cypress Golf Club, Los Alamitos Race Track, and Forest Lawn Cemetery.

Policy 9.1: Work with the owners of large, privately owned open space resources that are unique in nature and hard to replace.

Policy 9.2: Support improvements to the Cypress Golf Club.

GOAL 10: Protect the public health, safety, and welfare by preserving areas as open space that pose a potential threat to the community.

Policy 10.1: Conserve Cypress' flood control facilities as appropriate to protect the public health, safety, and welfare.

Policy 10.2: Preserve Nature Park as a flood control facility.

THE CONSERVATION PLAN

The Conservation Plan describes the approach to be used in implementing conservation goals and policies and addresses preservation of the City's remaining natural resources.

WATER RESOURCES

Water Resources

The 1990 Groundwater Management Plan outlines strategies for conserving water resources in Orange County. The Plan outlines the following five goals for conserving water in Orange County: 1) increasing basin water supplies, 2) protecting and enhancing water quality, 3) improving basin management, 4) improving relations with constituents, and 5) improving Orange County Water District management and operation.

There are several programs being implemented to improve basin management and decrease reliance upon imported water.

- The MWD Seasonal Storage Program gives local agencies financial incentives to store water through the winter months, thus reducing peak loads in the drier summer months.
- The OCWD Conjunctive Use Well Program offers local agencies low interest loans for construction of up to three wells.

Cypress in conjunction with the Southern California Water Company (SCWC) will promote voluntary water conservation strategies to be implemented year round. Methods to reduce water consumption include drought-resistant landscaping and water saving irrigation, especially for city projects and new developments. Other measures include low-flow shower heads

and toilets, flow restrictors, and drip irrigation. The City will provide information about these programs at City Hall.

BIOLOGICAL RESOURCES

Cypress' existing biological resources primarily include ornamentals utilized for landscaping purposes. The City will promote the use of native plants and continue its street tree planting program to preserve water resources and enhance landscaping throughout the community.

An important biological resource in Cypress is the landmark trees which are preserved through a Landmark Tree Ordinance. The Ordinance prohibits any person from removing or pruning a landmark tree without a permit from the City Council. The City Council considers a number of issues prior to the issuance of a permit, such as:

- The condition of the landmark tree with respect to disease, general health, danger of falling, proximity to existing or proposed structures and interference with utility service;
- The topography of the land surrounding the landmark tree and the effect of the removal of the tree on erosion, soil retention, and diversion or increased flow of surface waters;
- The number of other trees, both landmark and non-landmark trees, existing in the neighborhood and the effect of the proposed removal upon property values in the areas and upon the public health, safety, prosperity and general welfare in the area;
- The number of healthy trees that the parcel of land upon which such tree is growing will support, and other good landscaping and forestry practices;
- The proposed replacement(s), if any, for the tree; and
- Recommendation from public works director and director of recreation and parks.

In addition to limitations on pruning and removing landmark trees, no one may construct a structure within 30 feet of a landmark tree.

ENERGY

The Land Use Housing, Growth Management, and Air Quality Elements all have goals and policies to create a jobs/housing balance. The Conservation/Open Space/Recreation Element intends to conserve resources such as fossil fuels through a jobs/housing balance, thereby reducing the number of home to work trips. The City will also require that new developments utilize energy saving devices, and that existing structures be retrofitted to conserve energy.

Cypress' location in southern California makes it well suited to taking advantage of solar power. Design of buildings and subdivisions should take the mostly sunny winters and the hot summers into consideration. Southern exposures in the winter and limited western exposure in the summer are both important. Streets which run east-west are more adaptable to solar energy practices than north-south streets. The ideal building orientation for the Southern California coastal inland regions has been recommended as a 35 degree variation to the southwest of the building's long axis. State Title 24 Energy Regulations establish energy performance Building Code requirements that the City will follow and implement.

SOLID WASTE

To reduce the amount of solid waste generated in Cypress, the City has proposed a number of programs. The City has prepared a draft Source Reduction and Recycling Element and is currently considering which measures to implement. Strategies to reduce waste include source reduction, recycling, composting, public education, special waste, and household hazardous waste. Specific programs will be implemented under each of these strategies which are projected to reduce the amount of waste generated in Cypress by 30 percent in 1995 and 50 percent by 2000.

Source reduction concentrates on eliminating waste before it is created. The City is considering to lobby for state and federal legislation calling for less packaging or other pre-waste measures. This measure is projected to reduce waste by approximately 216 tons in 1991. The City may also implement a local ordinance directing City personnel to purchase products without excessive packaging, reducing the amount of waste generated in Cypress by a projected 52 tons in 1992. Other programs being considered include land use/zoning modifications, public education, rate structure modification and on-site composting.

Recycling focuses on retrieving goods that may be processed into new products. Curbside collection at individual residences has already diverted approximately 5 percent of residential waste in Cypress. Collecting recyclable waste from multi-family developments and commercial and industrial uses would require waste haulers sorting the waste to find recyclable goods. Combined collecting recyclables from multi-family, commercial, and industrial facilities would eliminate an anticipated 6,579 tons of waste in 1992. As the recycling project continued, a projected 111,055 tons of waste would no longer be delivered to landfills. In addition, composting material may be retrieved through curbside collection to later be transferred to a regional processing facility, reducing the waste stream by 1,550 tons. Another recycling option the City may consider are modifications to the building code, requiring new developments to contain both recycling and solid waste trash bins. This would be implemented through site review.

Special and household hazardous waste collection involves the City's cooperation with County programs. Items to be included in this special collection are household waste, tires, asbestos, and infectious waste.

Ultimately, all of these programs rely on *public education* through printed materials, community outreach, mass media, and school programs. The City plans on educating the public about source reduction, recycling, and composting.

HISTORIC, ARCHAEOLOGIC, AND PALEONTOLOGIC RESOURCES

Even though there are no historic, archaeologic or paleontologic resources known to currently (1992) exist in Cypress, with the City's rapid modernization, there still exists the potential for historic properties in some limited capacity. Certainly, the discovery of an Indian skeleton by a construction crew suggests that there could be additional Native Americans burials in the area. That coupled with the fact that only one small survey has been done in Cypress, there is no guarantee that the area is without cultural resources. Accordingly, new development on land areas not previously covered by impervious surfaces shall require a literature search and strict adherence to CEQA (Appendix K) for environmental documentation and mitigation measures.

THE OPEN SPACE/RECREATION PLAN

The Open Space/Recreation Plan addresses how the City will provide adequate open space and recreation resources to City residents and workers. The Element emphasizes coordination amongst the City, local agencies, and community groups to provide recreation opportunities. Joining the efforts of all these groups removes some of the organizational and financial demands from the City, while it secures a well developed recreational system.

PARKS

The Open Space/Recreation Plan contains measures to ensure that adequate recreational opportunities are provided for City residents. The City has approximately 78 acres of parks, including community, neighborhood, mini, and nature parks.

According to Cypress adopted park standards, the City has a shortfall of almost 50 acres of public open space. Meeting the community's standards seems infeasible, if not physically and financially impossible for the City. Only a few scattered parcels remain in residential neighborhoods that could become park land, and financial resources are limited for acquisition of these sites.

Park Site Selection Standards

The State of California Planning and Zoning law and the Subdivision Map Act Code Section 66477 (The Quimby Act) indicate that the legislative body of a City or County may, by ordinance, require the dedication of land, the payment of fees in lieu thereof, or a combination of both for park recreational purposes as a condition to the approval for a final tract map or parcel map. In cases where such dedications or fees have not been obtained for particular lots through a map, they may be imposed at the time that building permits are issued.

Among other requirements, the following conditions must be met:

- The Ordinance must include definite standards for determining the proportion of a subdivision to be dedicated and the amount of any fee to be paid in lieu thereof; and
- The legislative body has adopted a General Plan containing a Recreation Element, and any proposed park and recreational facilities are in accordance with definite principles and standards contained therein.

In conformance with this statute, the City of Cypress Conservation/Open Space/Recreation Element includes standards determining land requirements for future park sites. Table COSR-5 lists shortfalls/surpluses in park acreage based on the City's adopted standard.

**TABLE COSR-5
EXISTING AND FUTURE PARK ACREAGE NEEDS**

	Acreage Required			Available Acreage from Existing and Proposed Parkland		Surplus/Shortfall	
	Population	Parks 3.0 Acres/ 1000	School Playground 1.5 Acres/ 1000	District Parks	School Playgrounds	District Parks	School Playgrounds
Existing	42,655*	128 acres	64 acres	78 acres	113 acres	- 50 acres	+ 49 acres
Future	44,310	132 acres	66 acres	78 acres	113 acres	- 54 acres	+ 47 acres

*Note: Based on U.S. Census, 1990.

Source: City of Cypress Parks and Recreation District, Cotton/Beland/Associates, Inc.

Despite the shortage of vacant land, Cypress may obtain parkland through the following methods: parkland dedication requirements specific plans, parkland lease arrangements, assessment districts, developer land dedications and exactions, and urban open space and recreation program.

Parkland Dedication Requirements: The parkland dedication requirements (or fees-in-lieu) in the subdivision ordinance should remain at three acres per 1,000 residents (130.68 square feet). The remaining one and one-half acres per 1,000 residents are provided at school sites.

Funds for park development are limited, and financing mechanisms for future facilities must be explored. Financing options to investigate include assessment districts and developer land dedications and exactions.

Specific Plans: The specific plan process currently employed to review development in the large acreages in the business park can be used to set aside parkland for future development. Some cities require significant public amenities from industrial developers in a manner not dissimilar to the requirements placed upon residential developers (e.g., Brea "Art in Public Places" program). This concept could be expanded to include public parkland in employment centers as an amenity for local employees.

Parkland Lease Arrangements: The City can explore the potential for long-term leases of vacant school sites for use as public parks. A long-term lease of at least 20 years is necessary to ensure that it is economically feasible to develop the site as a park. This option is becoming less feasible as many "closed" school sites are needed to accommodate growing student populations or are being utilized for other purposes. However, if vacant school sites occur in the future, parkland lease arrangements are an option.

Assessment Districts: State law provides for the establishment of special assessment districts to provide public facilities. Certain types of these districts (Mello-Roos) can be used to develop and maintain public parks in newly developing areas based upon a vote of current land owners.

Developer Land Dedications and Exactions: The City should implement mechanisms to require dedication of land and/or payment of exactions by developers for the purpose of providing and preserving open space and recreational facilities and improvements in developing areas and for the preservation of such facilities and improvements in already developed areas.

Urban Open Space and Recreation Program: Also known as Roberti-Z'berg-Harris Grants, this program provides state grants-in-aid for the purchase, improvement and maintenance of public parks. Most (69%) of the funds allocated to this program are distributed to local jurisdictions (including Cypress) in the form of block grants based on population. Approximately \$360,000 per year is available on a competitive basis from the State for use in innovative park and recreation programs that meet special needs. Since the proposed neighborhood park(s) in the business park area will be unique and highly innovative in nature, it appears very likely that Cypress could win park development funds through the competitive, or needs, grant program. These funds would partly offset any acquisition and development costs.

Bike Paths

Bike paths already link many open space resources within Cypress. Further extensions to the bike path system are outlined in Figure COSR-3. The proposed system provides additional access to recreation and open space resources.

Cypress should continue to expand recreational programs and services to serve the City's growing population. The following several recommendations contribute to providing a continued high level of recreational services within Cypress.

- Develop cooperative arrangements with adjacent park departments and park and recreation districts for providing a coordinated set of recreational programs and a broader range of recreational resources than currently available.
- Continue to employ cooperative use arrangements with the Anaheim Union High School District and the Cypress Elementary School District in providing additional recreational resources. If necessary, these cooperative use arrangements can be formalized into written agreements. Past practice has been to cooperate on a regular, but informal, basis.
- Continue to work with various civic and recreation oriented private groups (e.g., Boys Club and YMCA) in providing a recreational program that is well coordinated and responsive to changing community needs.

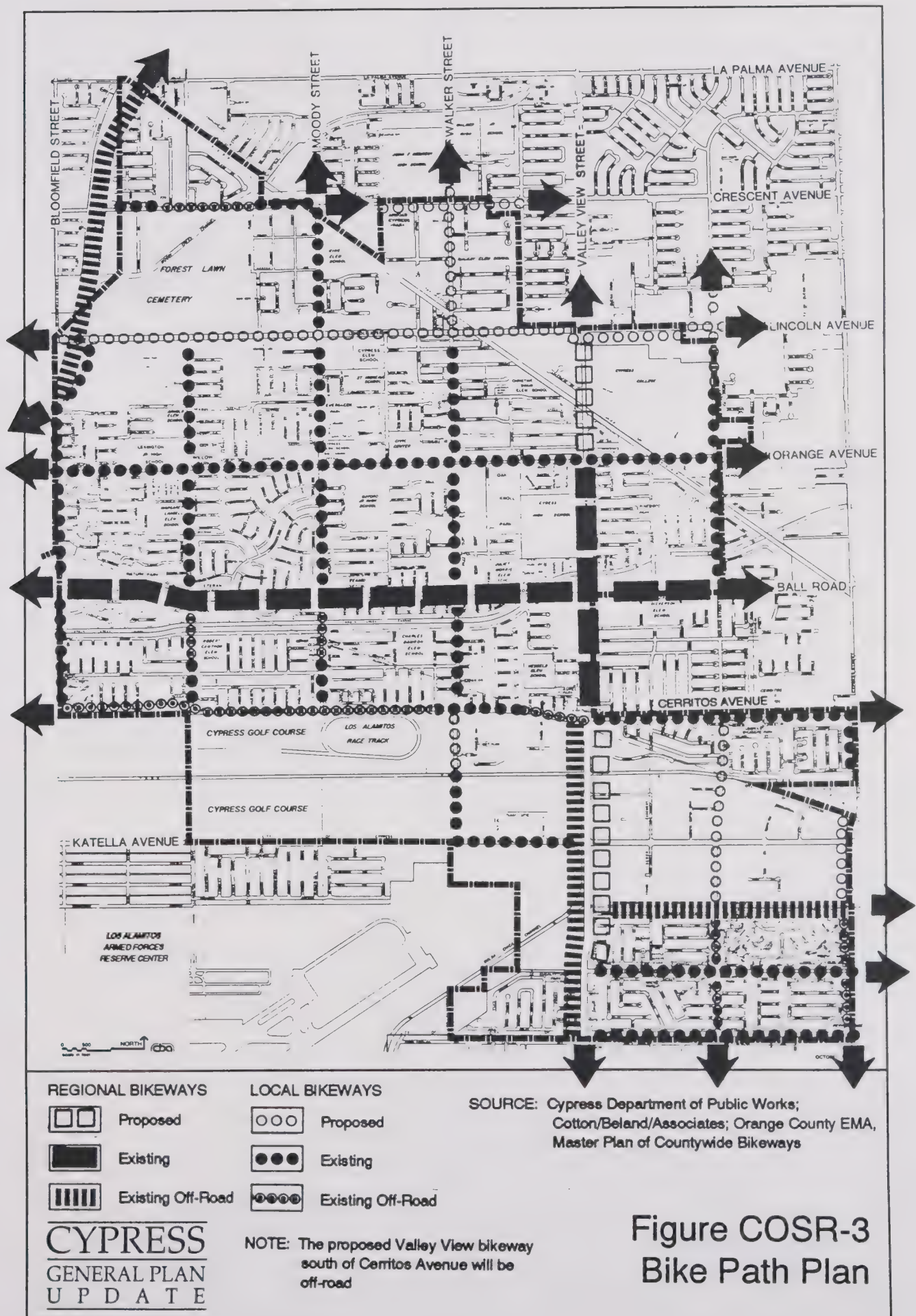


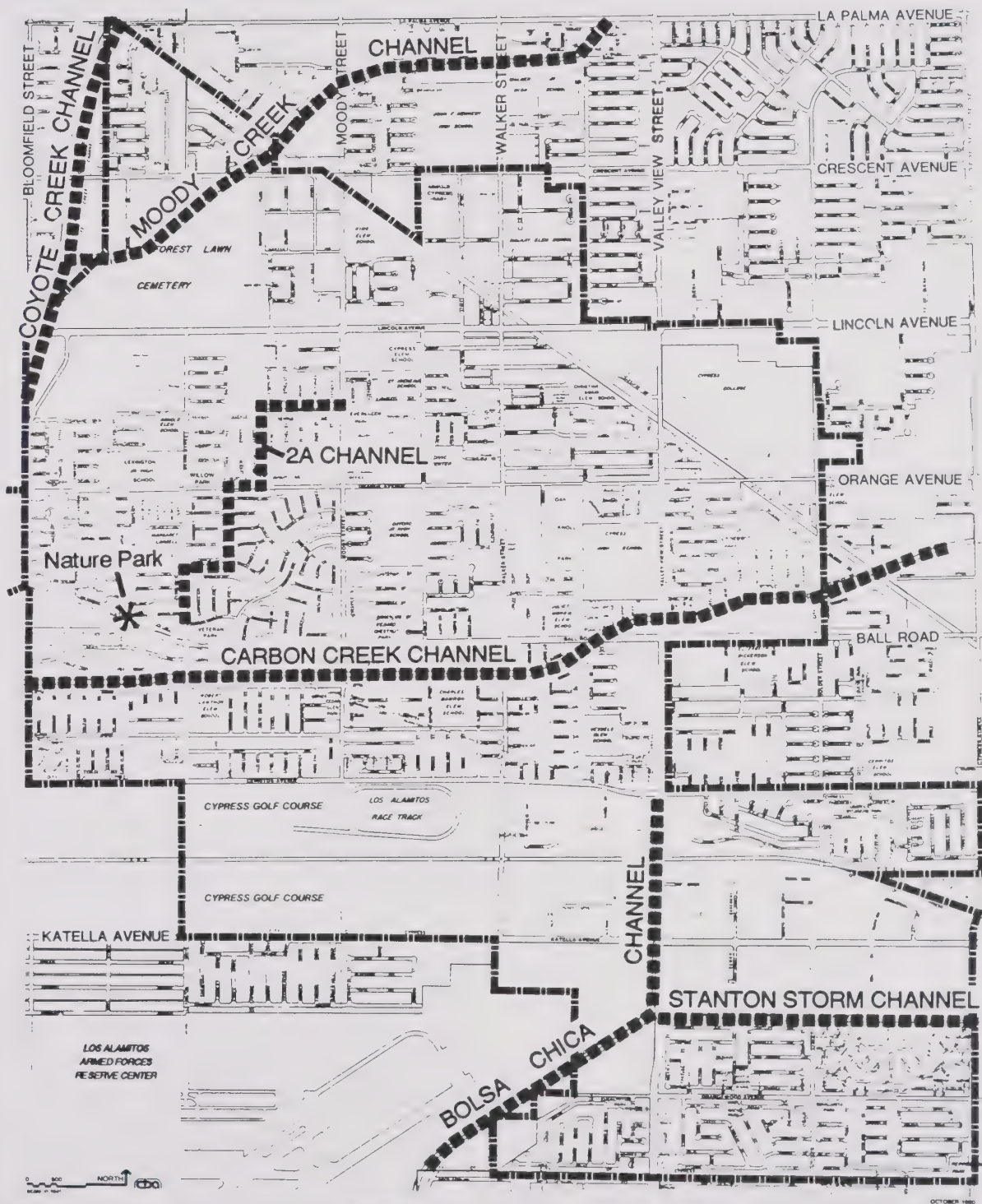
Figure COSR-3
Bike Path Plan

The City of Cypress is almost completely urbanized. However, the City contains privately owned land for recreation, and to protect the public safety.

Four open space areas - the Cypress Golf Club, Navy Golf Course, Los Alamitos Racetrack, and the Forest Lawn Cemetery - are privately owned. These resources provide visual relief from the urban setting. Improvements to the Cypress Golf Club will continue to be supported by the City.

In addition to these open space areas, the Safety Plan identifies areas within Cypress that pose a potential threat to the community's health and safety. The implementation of proper planning techniques will minimize the threat to the public.

Cypress' flood control facilities are comprised of the flood control channels shown on Figure COSR-4, and the Nature Park. This latter facility, while serving as a park, is also a flood retention basin used to collect storm runoff at a low point and pump it to the nearby Carbon Creek Channel. Due to the adequacy of these flood control facilities, no structures in the City are subject to inundation during a 100 year flood; therefore, no areas must be left for flood control purposes. It is recommended, however, that bicycle trails use flood control channel rights-of-way when appropriate and feasible.



SOURCE: Cypress Department of Public Works

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Figure COSR-4
Flood Control Facilities

CYPRESS



GENERAL PLAN
U P D A T E

Safety

Element

CYPRESS

GENERAL PLAN

U P D A T E

CITY OF CYPRESS

GENERAL PLAN

SAFETY ELEMENT

FEBRUARY, 1993

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INTRODUCTION

The Safety Element is an official guide for the City Council, government agencies, and individuals to identify and understand potential hazards confronting Cypress. The Element examines manmade and natural hazards that could endanger the public safety and welfare. These concerns are subsequently incorporated into goals, policies, and implementation measures to reduce impacts of hazards.

Previously, Cypress did not have its own Safety Element, but instead adopted the County of Orange Safety Element by reference. While much of the baseline information and policy direction contained in the County's Element is still applicable to Cypress, the City realizes that it is necessary to have its own Safety Element to more appropriately address local safety issues, such as emergency preparedness, evacuation routes, the Armed Forces Reserve Center, and urban fire risks.

PURPOSE

The Safety Element helps protect a community from natural and man-made hazards. Natural hazards include flooding, earthquakes, ground rupture, and landslides. Man-made hazards result from hazardous and toxic materials, wildland/urban fires, crime, and aircraft overflight.

The element may also examine local safety issues such as vehicle accidents, power failures, and storm drainage. Ultimately, the safety element aims at reducing death, injuries, property damage, and economic and social dislocation resulting from these hazards.

RELATED PLANS AND PROGRAMS

A number of plans and programs contain information that relate to the City of Cypress Safety Element. A brief synopsis of relevant documents follows:

County of Orange Safety Element

The County of Orange Safety Element provided the base data to develop the Cypress Safety Element. The County's Element contains a comprehensive inventory of hazards that impact persons and property countywide. Specifically, this document inventories crime, fire, aircraft overflight, hazardous materials, nuclear materials, and seismic concerns in Orange County. This information was subsequently utilized to develop goals, objectives and policies that mitigate these hazards. Action oriented programs outline specific measures that will be undertaken by the appropriate agency to achieve safety goals.

Cypress Disaster Plan

The Cypress Disaster Plan serves as the community's Emergency Operations Plan (EOP) which provides guidance during emergency situations associated with natural disasters, technological incidents, and nuclear defense operations. The Plan does not address normal day-to-day emergencies or the well-established and routine procedures used in coping with such emergencies. Rather, this EOP analyzes potential large scale disasters that require a coordinated and immediate response.

Aid during these unique emergency situations is available within the local government structure and associated agencies. The EOP identifies key personnel and groups in the Cypress Emergency Management Organization that are organized to protect life and property in the community. The Plan also identifies sources of outside support which might be provided through mutual aid by other jurisdictions, state and federal agencies, and the private sector.

County of Orange Hazardous Waste Management Plan

Current government responsibilities for hazardous waste management are divided among federal, state, and local levels. The Orange County Hazardous Waste Management Plan, adopted in 1989, only addresses those issues having local responsibilities and involvement. However, both state and local policies for controlling emergencies are outlined.

The County's Plan sets forth a comprehensive local hazardous waste strategy. Several components comprise this strategy, including:

- Current and future hazardous generation and management needs in Orange County,
- Framework for the development of facilities to manage hazardous waste,
- Policy directions toward developing county-wide programs for waste-reduction, and household and small quantity business hazardous waste collection.

Airport Land Use Plan

The Airport Land Use Commission (ALUC) is the agency, charged by the State, with the responsibility of formulating a comprehensive airport land use plan for the anticipated growth of each public use airport and its environs. The purpose of the airport land use plan is to safeguard the general welfare of the inhabitants within the vicinities of airports and to ensure the continued operation of the airports.

The Airport Land Use Commission for Orange County has adopted the Airport Environs Land Use Plan (AELUP) which governs the following airports:

AFRC Los Alamitos
MCAS Tustin
MCAS El Toro
John Wayne Airport
Fullerton Airport
Meadowlark Airport (currently closed)

City and County General Plans must be consistent with the AELUP unless specific findings can be made by the local legislative body. State law grants review powers to the Airport Land Use Commission (ALUC) involving the following actions of local agencies within the planing boundaries of the ALUC:

- Amendments of a City's General Plan;
- Amendments of a City's Specific Plan;
- Adoption of Zoning Ordinances; and
- Adoption of Building Regulations.

This Land Use Element reflects the intent of State law granting to the ALUC review powers of those actions of the City of Cypress as enumerated above.

Prior to amending a General Plan or Specific Plan, the involved locality must submit the proposal to the ALUC for review. ALUC review does not, however, include other applications, including, but not limited to, conditional use permits, variances, subdivision or parcel maps, and site pan approvals.

In terms of assessing consistency between local General Plans and the AELUP, the County focuses on the following three areas: noise, safety and building height. The updated Cypress Noise and Safety Elements address these issues; building height is also examined in the Cypress Zoning Ordinance and Specific Plans. The following building criteria are utilized as part of the County's AELUP consistency review procedures:

- Does the Agency have a map or other graphic which depicts imaginary surfaces for the airports which impact the City?
- Are there policies in the General Plan which reference FAA studies and clearances?

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act requires the Department of Mines and Geology to delineate areas of high potential ground shaking, liquefaction, earthquake-induced landslides, and other ground failures. Three primary tasks are to be performed:

- Compile maps identifying seismic hazards
- Revise and provide final maps
- Create archives of all geotechnical site investigation reports

Currently, the Department of Mines and Geology is in the process of creating these elements.

SCOPE AND CONTENT OF ELEMENT

This Element is divided into four sections: Existing Safety Characteristics, Issue Identification, Goals and Policies, and the Plan. The assessment of local hazards leads to the development of issues. The goals and policies utilize this information to minimize risk through emphasizing emergency preparedness and land use planning. A detailed solution is outlined in the Safety Plan which examines specific measures which seek to ensure the safety of Cypress residents.

RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS

The Safety Element is one of eight elements contained within the Cypress General Plan. According to the General Plan Guidelines, all general plan elements have equal legal status. Oftentimes, issues contained within each general plan element partially overlap with another element. The relationships between the Safety Element and Land Use, Housing, Circulation, Conservation/Open Space/Recreation, Noise, Air Quality, and Growth Management Elements are discussed below:

The Safety Element is the primary vehicle for relating local safety planning to city land use decisions. A city should establish land use planning policies, standards, and designations based on the criteria set forth in the safety element.

Land use designations are but one factor which determine where housing will be proposed within a community. The location of housing development is also influenced by the Safety Element which identifies potential hazards in relation to the proposed development. While working within the limitations established by the Land Use and Safety Elements, the City must provide adequate housing opportunities to its residents.

The Circulation Element strives to create an efficient and safe transportation network. The Safety Element includes a discussion of vehicle accidents and other safety/circulation issues.

To insure the public's safety, the Safety Element, which incorporates the Seismic Hazards Mapping Act, may designate land to be preserved as open space. This, oftentimes, occurs as a result of special studies conducted by other governmental agencies, such as the Federal Insurance Management Agency (FIMA) identifying flood plains along identified earthquake faults. The Conservation/Open Space/Recreation Element discusses land that is preserved for the public health and safety.

The Noise and Air Quality Elements, like the Safety Element, are concerned with the public welfare. The Noise Element identifies contributors to noise pollution like an airport or busy arterial; whereas, the Safety Element addresses flight patterns and the possibility of an accident in order that evacuation policies can be created.

The Growth Management Element controls the development of a community. Gradual growth gives decisionmakers the opportunity to make informed decisions about a city's development. This attempts to prevent growth from occurring in inappropriate places (in areas subject to flooding) because of inadequate review.

EXISTING SAFETY CHARACTERISTICS

Communities are affected by both natural and manmade hazards. The following discussion explores hazards that may confront the City of Cypress including flooding, seismic, geologic, hazardous materials, urban fires, crime and aircraft overflight.

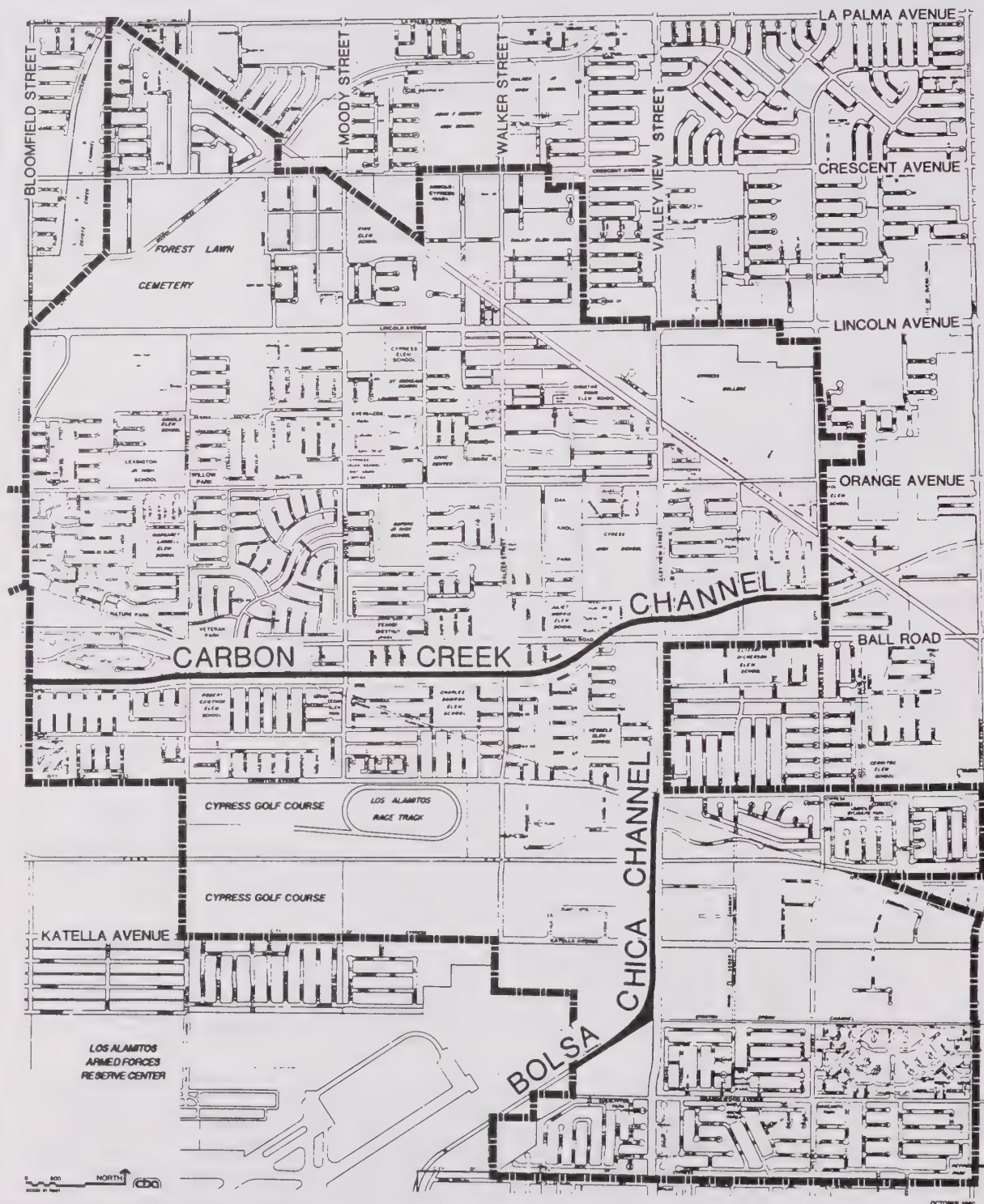
NATURAL HAZARDS


Flooding

The City of Cypress contains no natural permanent water features. A number of man made lakes do, however, exist within the Cypress Golf Course. In addition, six storm drain channels--Moody Creek, Coyote Creek, 2A, Carbon Creek, Stanton Creek, and Bolsa Chica Creek traverse the City and transport water on occasion. The Orange County Safety Element identifies Carbon Creek as a major drainage facility for northern Orange County.

Historically, Orange County has intermittently experienced widespread flooding. Storm drain improvements by the Orange County Flood Control District generally provide relief from the flooding. According to the Flood Insurance Rate Map for Orange County, the projected 100-year flood for Cypress is contained within the Carbon Creek and Bolsa Chica storm drain channels. However, like most of Orange County, the projected 500 year flood will result in widespread flooding throughout the entire City. (See Figure S-1)

Outside Orange County, the Los Angeles County Drainage Area's (LACDA) flood control system manages storm waters. According to the U. S. Army Corps of Engineers, it has become evident that the system does not have sufficient capacity to provide adequate flood protection. In fact, a 100-year flood on the main system would inundate about 82 square miles, and existing drainage facilities only provide a 25



 100 Year Flood Zone

SOURCE: Flood Insurance Rate Map, Federal Emergency Management Agency, Sept. 1989

NOTE: The 100 year flood is contained within existing flood control facilities and the 500 year flood is anticipated to encompass the entire city.

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Figure S-1
Flood Zones

year-level protection in the lower basin where over 500,000 people reside. According to the Los Angeles County Drainage Area Review, all flood waters will be accommodated in the Coyote Creek Channel and Cypress is not affected.

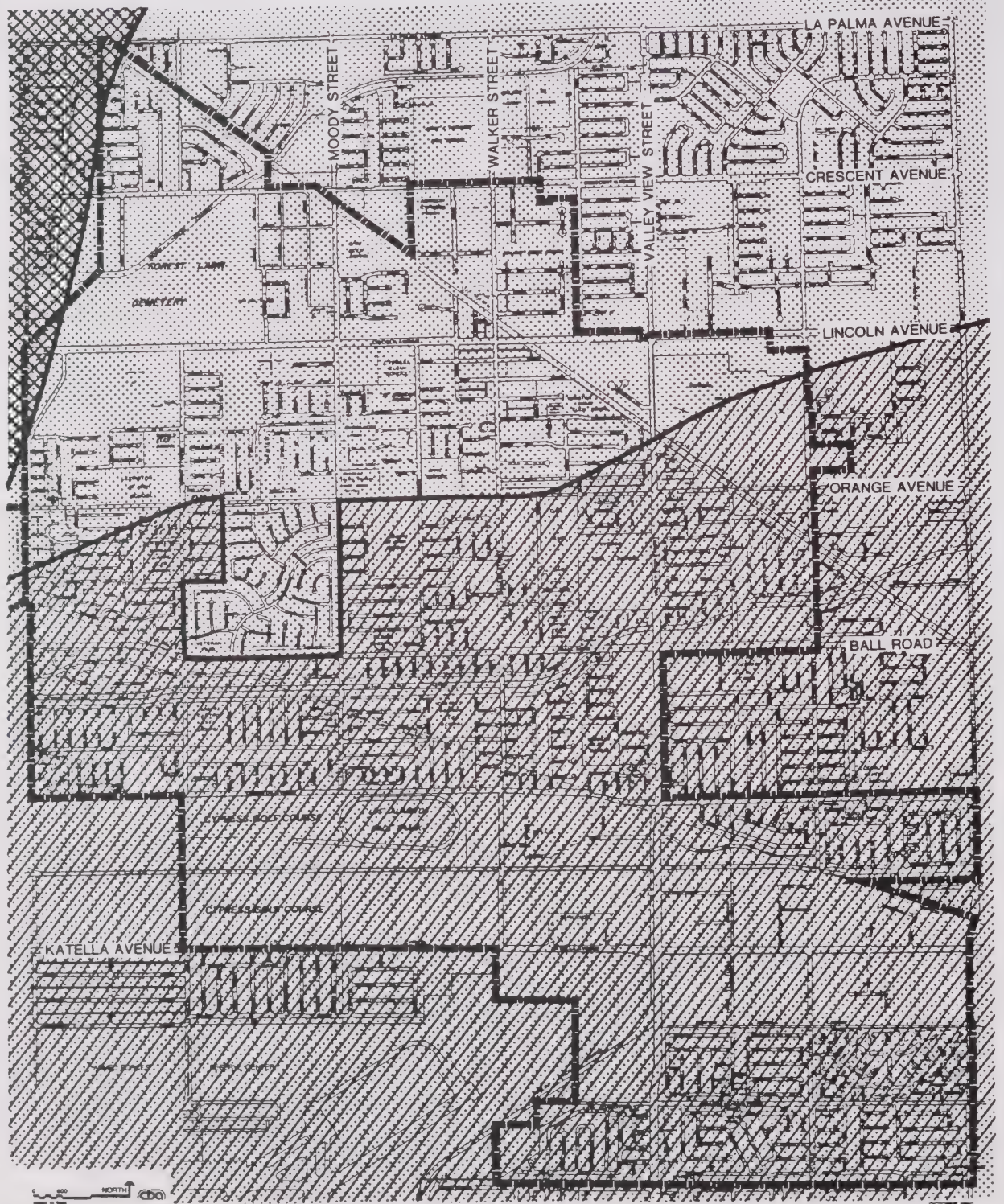
Cypress lies within the dam inundation area of three dams: Prado, Carbon Canyon and Whittier Narrows. (See Figure S-2) Prado Dam is located northeast of the City in Riverside County. The dam was designed in the 1930s to control floods of reasonable magnitudes (200-year flood) and run off which could be anticipated under future development. New data on current and projected levels of rainfall have shown Prado Dam to offer only seventy year flood protection. Carbon Canyon Dam, located in the northeastern portion of the City of Brea, is an earthfill dam, which was designed to hold 12,000 acre feet of water. If dam waters exceeded this capacity, the portion of Cypress below Orange Avenue could be completely covered.




The City has prepared emergency evacuation plans for these two dams and the Whittier Narrows Dam. The Whittier Narrows Dam is located in Pico Rivera. The dam is also of earthfill construction.

Seismic Hazards

The following section describes the presence and characteristics of seismic hazards in Cypress, including earthquake faults, surface rupture, ground shaking, liquefaction, hazardous buildings, and seismic response.

Earthquake Faults: While no active or potentially active faults are located within the City of Cypress, the entire Southern California region is considered to be seismically active. Five faults -- Newport-Inglewood, Norwalk, El Modena, Whittier-Elsinore, and Elysian Park -- are situated within close proximity to Cypress, and are mapped in Figure S-3. The San Andreas and San Jacinto are located some distance from Cypress, but these faults have the potential to deliver larger magnitude earthquakes than the earthquake faults previously mentioned.



-  Carbon Canyon Dam
-  Prado Dam
-  Whittier Narrows Dam

SOURCE: U.S. Army Corps of Engineers

CYPRESS
GENERAL PLAN
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Figure S-2
Dam Inundation Areas

Newport-Inglewood Fault: The Newport Inglewood fault zone is a series of an echelon northwest-trending and vertically-dipping faults extending from the southern edge of the Santa Monica Mountains southeastward to the offshore area near Newport Beach. From north to south, the fault segments are:

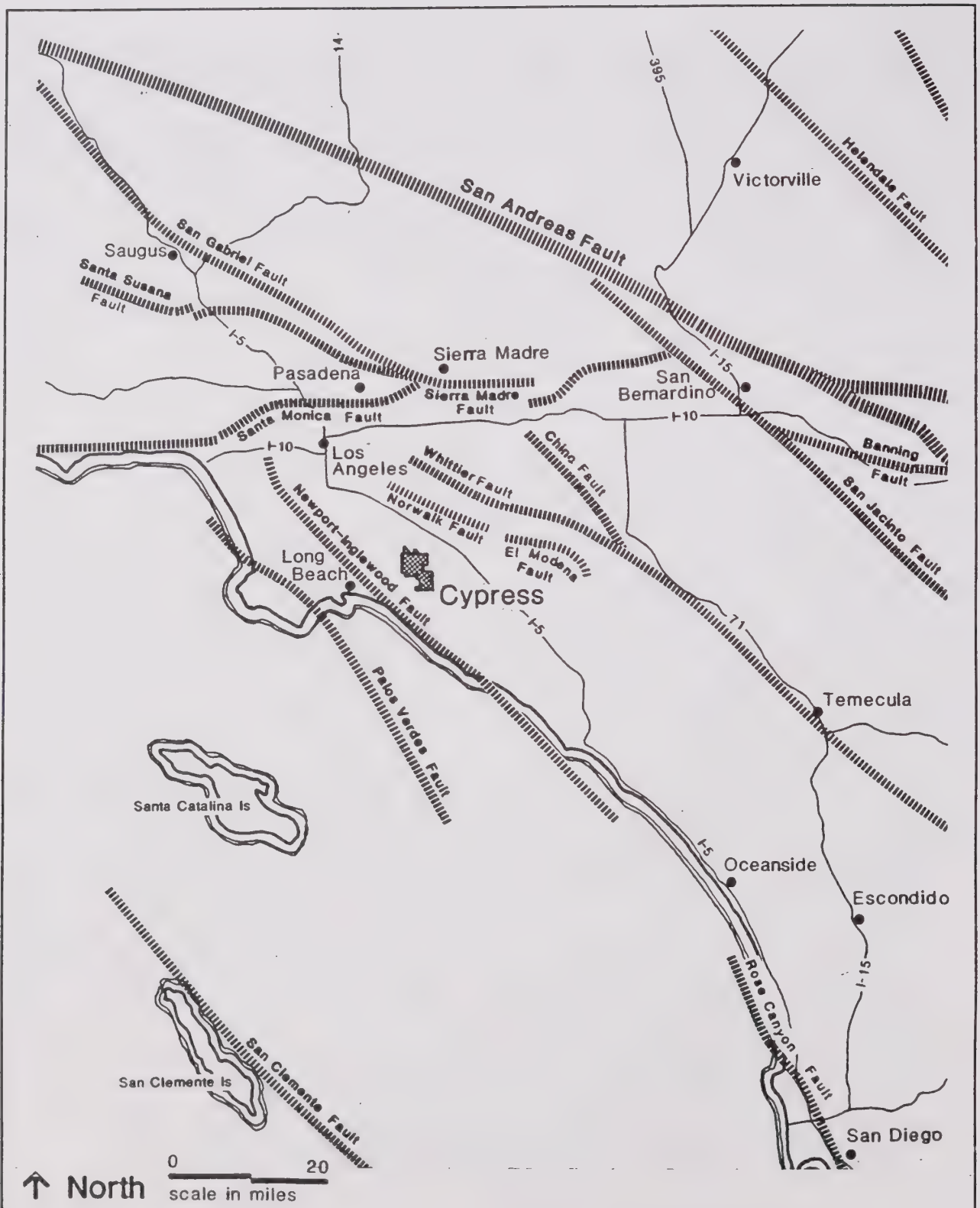
1. Charnock Fault
2. Overland Avenue Fault
3. Inglewood Fault
4. Potrero Fault
5. Avalon-Compton Fault
6. Cherry Hill Fault
7. Seal Beach Fault

Numerous recent shocks of 4.0 magnitude or greater, as well as the historic 6.3 magnitude Long Beach Earthquake in March, 1933, have been generated within this fault zone and suggest an active seismic history. Although there has been no observed ground displacement associated with the Newport-Inglewood Fault Zone, there may have been subsurface fault displacement of approximately seven inches associated with the October 21, 1941, and June 18, 1944, earthquakes. This fault zone could generate a 7.6 plus magnitude maximum credible earthquake.

Norwalk and El Modena Fault Zone: The Norwalk Fault is approximately 16 miles long and lies approximately five miles to the north of Cypress. Seismic activity has occurred along this fault, and the fault may have been the cause of a 4.7 magnitude earthquake.

The El Modena Fault is a north trending fault that is located approximately 10 miles north of Cypress. Evidence suggests that the fault was active at one time; however, the fault is now thought to be inactive.

Whittier Elsinore Fault: The Whittier-Elsinore Fault is approximately 10 to 12 miles north of the City. There have been several minor earthquakes along the fault. Seismic history reveals that the fault is able to produce a seismic event of magnitude 6.0 or greater



SOURCE: California Mines and Geology

CYPRESS
GENERAL PLAN
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Figure S-3
Regional Fault Map

Elysian Park Fault: The Elysian Park Fault, situated in the Montebello and Monterey Park areas, is 10 to 15 miles north of the City. It produced the 1987 Whittier Narrows earthquake that had a magnitude of 5.9.

Due to the recency of the Whittier Narrows earthquake, all data gathered has not been completely analyzed. Thus, the location, length, and potential earthquake generated from the Elysian Park Fault is unknown, and it is therefore not identified on the Fault Map.

San Andreas Fault: The San Andreas extends over 600 miles encompassing virtually the entire length of California. The fault is divided into segments which have somewhat distinctive behavior patterns. The southern segment is over 300 miles long and occasionally delivers large earthquakes.

The last great earthquake on this segment was the 1857 Fort Tejon earthquake which is believed to have caused a rupture extending 200 miles. Several other earthquakes have been attributed to the San Andreas Fault; the last one to affect Southern California was a 6.7 magnitude quake in 1899. It is estimated by geologists this fault may have the potential to generate an earthquake of magnitude 8.5 on the Richter scale which is called the maximum credible earthquake.

San Jacinto Fault: The San Jacinto fault branches from the San Andreas fault on the north side of the San Gabriel Mountains and parallels the San Andreas to the Mexico-California border. The San Jacinto fault has been very active, and damaging earthquakes have occurred along its entire length. The last earthquake on this fault exceeding 6.0 occurred in 1968. Ten damaging earthquakes have been attributed to this fault since the 1800s all of them exceeding 5.4 and the largest measuring 6.8 on the Richter scale.

Surface Rupture and Ground Shaking: Surface rupture resulting from earthquakes is unlikely to occur in Cypress because no faults have been identified within the City boundaries. The nearest active faults, El Modena and Norwalk, lie approximately five to ten miles north of Cypress. Other faults in the area include the Newport Inglewood, Whittier-Elsinore, Elysian Park, San Jacinto, and San Andreas.

The impact of earthquakes on Cypress depends on several factors. The particular fault, fault location, distance from the City, and magnitude of the earthquake all determine the degree of shaking that will occur in the City. In addition, the soil and geologic structure underlying Cypress influences the amount of damage that City may experience. The soils underlying Cypress include alluvium deposits which may become unstable during intense groundshaking.

The Newport-Inglewood Fault is anticipated to generate the most destructive ground shaking in Cypress. The El Modena and Norwalk, though closer to the City, are predicted to generate smaller magnitude earthquakes. The San Jacinto fault is very active and has historically produced 6.0 to 7.0 earthquakes. However, as Cypress lies approximately 40 miles to the south. The distance between the City and fault would alleviate the ground shaking impact.

Liquefaction Hazards: Liquefaction is a subsidiary hazard associated with intense ground shaking. When the earth accelerates, the soil can destabilize and if sufficient water is present in the soil, the soil and water can mix. Liquefaction is generally associated with shallow ground water conditions and the presence of loose and sandy soils or alluvial deposits.

According to the Cypress Disaster Plan and the Orange County Safety Element, Cypress, like most of Orange County, has granular sandy soil with a high water content. Areas with these conditions may experience liquefaction during extreme groundshaking.

Hazardous Buildings: During a seismic event, Cypress may be subjected to high levels of groundshaking. Buildings within the community as a result could sustain substantial damage. Some structures are particularly susceptible to earthquake damage, including tilt-up structures, unreinforced masonry buildings, older buildings, buildings over four stories, and mobile homes. Concrete tilt-ups built prior to 1974 may especially suffer damage. It is unknown precisely how many of these tilt-up structures exist within Cypress; however, it is believed that some are located in the Business Park. The Building Department has identified only one unreinforced masonry structure within the City boundaries. There are also

two mobile home parks in the City, which accommodate 373 mobile homes.

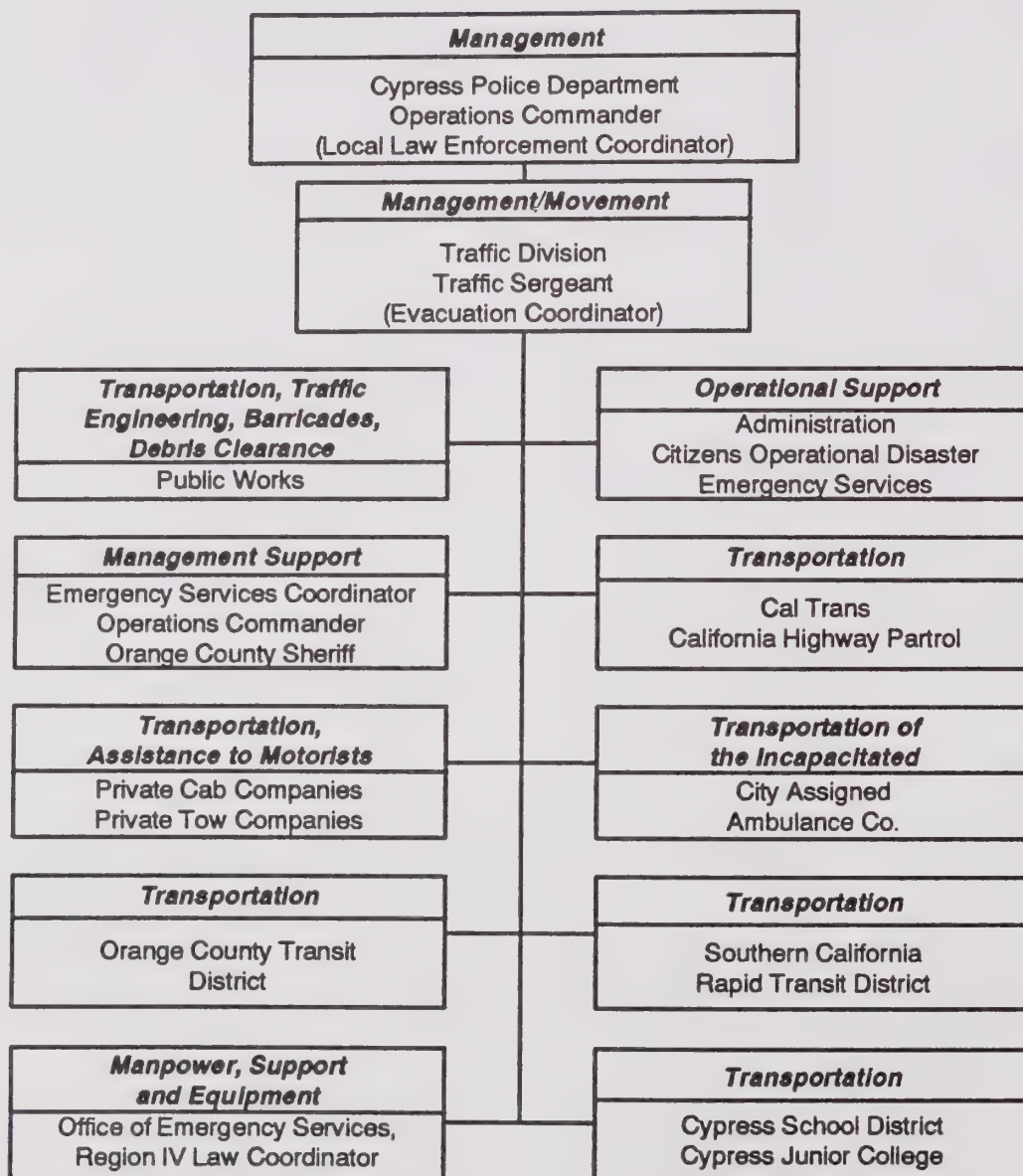
Other structures in Cypress are vulnerable to earthquake damage. The danger increases with the number of individuals that congregate within a specific area. According to the Cypress Disaster Plan, many sidewalks in the community are bordered by six foot high concrete walls, presenting a potential hazard to pedestrians were the walls to collapse due to groundshaking. Also, the potential for structural failures, capable of injuring large numbers of people in a given area, exists at the Los Alamitos Race Track during the racing season.

Seismic Response: The City of Cypress Disaster Plan serves as the community's Emergency Operations Plan (EOP) which outlines the City's actions during emergency situations, such as a seismic event. The Plan specifies: operations during an emergency, organization and assignment of responsibilities, coordinating instructions, an explanation of how the plan is to be administered, procedures to identify emergency responsible personnel, and methods to request aid/support from other local communities. These activities involve a number of agencies including the police department, fire department, medical facilities, public health officials, coroner, and care and shelter operations.

All emergency evacuation activities are coordinated by the Evacuation Coordinator, the Police Chief. The Police Chief will issue evacuation orders based on information gathered from experts on the emergency. Evacuation operations will be conducted by law enforcement agencies, highway/road/street departments, and public and private transportation providers. (See Figure S-4)

Landslides

The City of Cypress lacks any significant topographical features. According to the Division of Mines and Geology, no landslides have been recorded within the city boundaries and are not anticipated based on the area's flat terrain.



MAN-MADE HAZARDS

Some hazards result from man-made facilities or human actions. This section explores hazardous materials, fire, crime, and aircraft overflight.

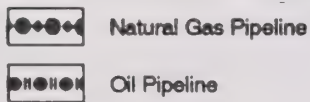
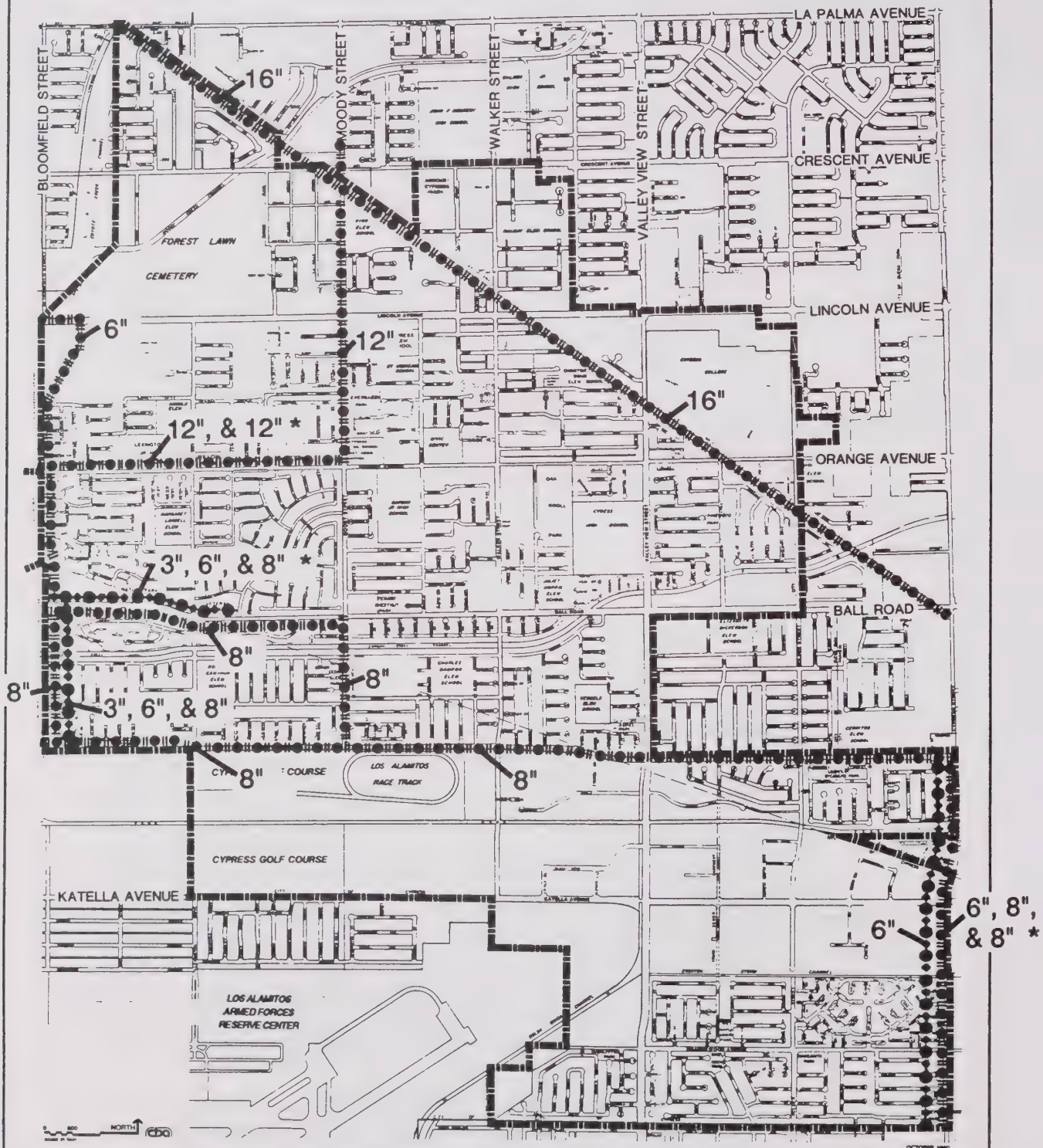
Hazardous and Toxic Materials

Although most chemicals present little or no danger to the environment or human health when used or stored properly, in the past few decades, some chemicals commonly used and widely dispersed have been found to be significantly harmful. Federal, state, and county agencies have generally recognized toxic substances as chemicals or mixtures whose manufacture, processing, distribution, use, or disposal may preset an unreasonable risk of injury to human health or the environment. The City's Disaster Plan lists forty one businesses that store or utilize hazardous materials within Cypress.

Transport of Hazardous Materials: Areas located near major transportation routes are more susceptible to spills of hazardous materials than are other parts of the community. Major transportation arterials in Cypress include Katella Avenue, Valley View Street, and Lincoln Avenue. In addition, two railroad lines transverse the City, and the community is within the air approach for the Los Alamitos Armed Forces Reserve Center.

Pipelines: A number of pipelines underlie the City of Cypress (See Figure S-5). These lines transport natural gas, crude oil, and oil. The Transportation Research Board of the National Research Council has published a special report (# 219) entitled *Pipelines and Public Safety* that discusses the dangers associated with natural gas, crude oil, and oil. The following analysis is excerpted from this document:

"The primary constituent of natural gas, methane, is flammable when mixed with air (Federal Power Commission 1966, 3) Natural gas may leak in relatively small quantities from cracks, flaws, or damaged areas of the pipeline, and not create a serious incident if the operator finds the leak and



SOURCE: Cypress Department of Public Works

*NOTE: Each # represents separate oil or gas lines.

CYPRESS
GENERAL PLAN
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Figure S-5
Oil and Gas Pipelines

repairs the line in a timely manner. However, if significant quantities of gas are released into the atmosphere from a rupture of a pipe wall, the gas will burn and can explode if ignited in a confined space (Associated Pullman Kellogg Limited 1981, 7.1).

Crude oil and petroleum products are heavier than air. Crude oil may burn with intense heat if ignited and may contaminate the environment. Petroleum fuels such as gasoline and jet fuel, which are transported in their natural liquid state, also pose a fire and pollution hazard."

Urban Fires

Fire protection is provided by the Orange County Fire Department in Cypress. The following section describes potential fire hazards in the City, and the Department's manpower and equipment resources to handle a fire or other emergencies.

Fire Hazard Potential: Building materials and wind speeds can contribute to the spread of urban fires. According to the Cypress Disaster Plan, the community does not contain any large housing tracts with wood or shake roofs. However, a few apartment complexes in Cypress do have wood roofs and are thereby at greater risk of fire. The City is subject to periodic high winds, including Santa Ana Winds, which will quicken the spread of fire. However, separation and setback requirements in effect when most houses in the City were built assist in minimizing the risk of fire spread.

Fire Department: The Orange County Fire Department (OCFD) is divided into six battalions and operates 46 fire stations. Fourteen cities and the unincorporated portions of Orange County contract with the OCFD to provide fire protection services. The OCFD has mutual aid agreements with the U. S. Forest Service, California Department of Forestry, and Los Angeles County.

Cypress has two fire stations, Station 12 and Station 17, within its jurisdiction. Station 12, established in 1943, contains one engine and one twin agent unit. This equipment is manned by 25 paid call firefighters. Station 17, located in southern

Cypress, serves as the Battalion 1 headquarters for the Orange County Fire Department. Battalion 1 includes 93 firefighters. Thirty one firefighters are on duty at a time, including the Duty Battalion Chief.

The fire equipment stationed at Battalion 1 includes a heavy rescue unit and a twin agent mini (small truck using two chemical agents, typically for airport accidents) with a crash unit, three thousand gallon water tender, and a lighting/breathing air compressor unit. Battalion 1 also has access to other equipment in the Orange County Fire Department including medium bulldozers, mobile mechanic trucks, and a fuel tender. Other equipment is available to the Battalion through the County Master Mutual Aid Agreement.

The Department's goal is to maintain a response time (from the time of dispatch) of five minutes for the first responder engine company and provide paramedic response within ten minutes, 90% of the time. According to the Orange County Battalion Chief, Battalion 1 has consistently met this goal.

Crime

The City of Cypress operates its own police department, located at 5275 Orange Avenue. The City Police Force serves Cypress with a staff of 111 officers. Fifty-three of the City's officers are sworn officers, and the remaining are either part-time employees or non-sworn. The patrol staff is comprised of forty nine individuals of which 38 are sworn officers. In addition, the Police Department has an investigations bureau. Three detectives are assigned to the Special Enforcement Team and work narcotics enforcement.

The City of Cypress Police Department has an average response time of 3.2 minutes to emergency calls and 6.4 to non-emergency calls. In comparison, Orange County Police Department's overall goal response time is 5 minutes or less.

The Cypress Police Department supports four key programs - Neighborhood Watch, Drug Abuse Resistance Education (DARE), Citizens Operational Disaster Emergency Services (CODES) and Good Neighbor - to fight crime and promote citizen involvement in Cypress.

Neighborhood Watch: The Neighborhood Watch Program established in 1980 is the longest running program in Orange County of its type. The program aims to reduce crime by organizing the community to protect their neighborhoods, The Police Department facilitates the program and has divided Cypress into areas. Each area has a leader that organizes operations.

DARE: This program targets sixth grade students and above age groups. It is a peer-group motivational program to help students resist using drugs. A full-time police officer is assigned to the program.

CODES: This program organizes City volunteers to respond to disaster situations. Eighty volunteers are currently participants in the program.

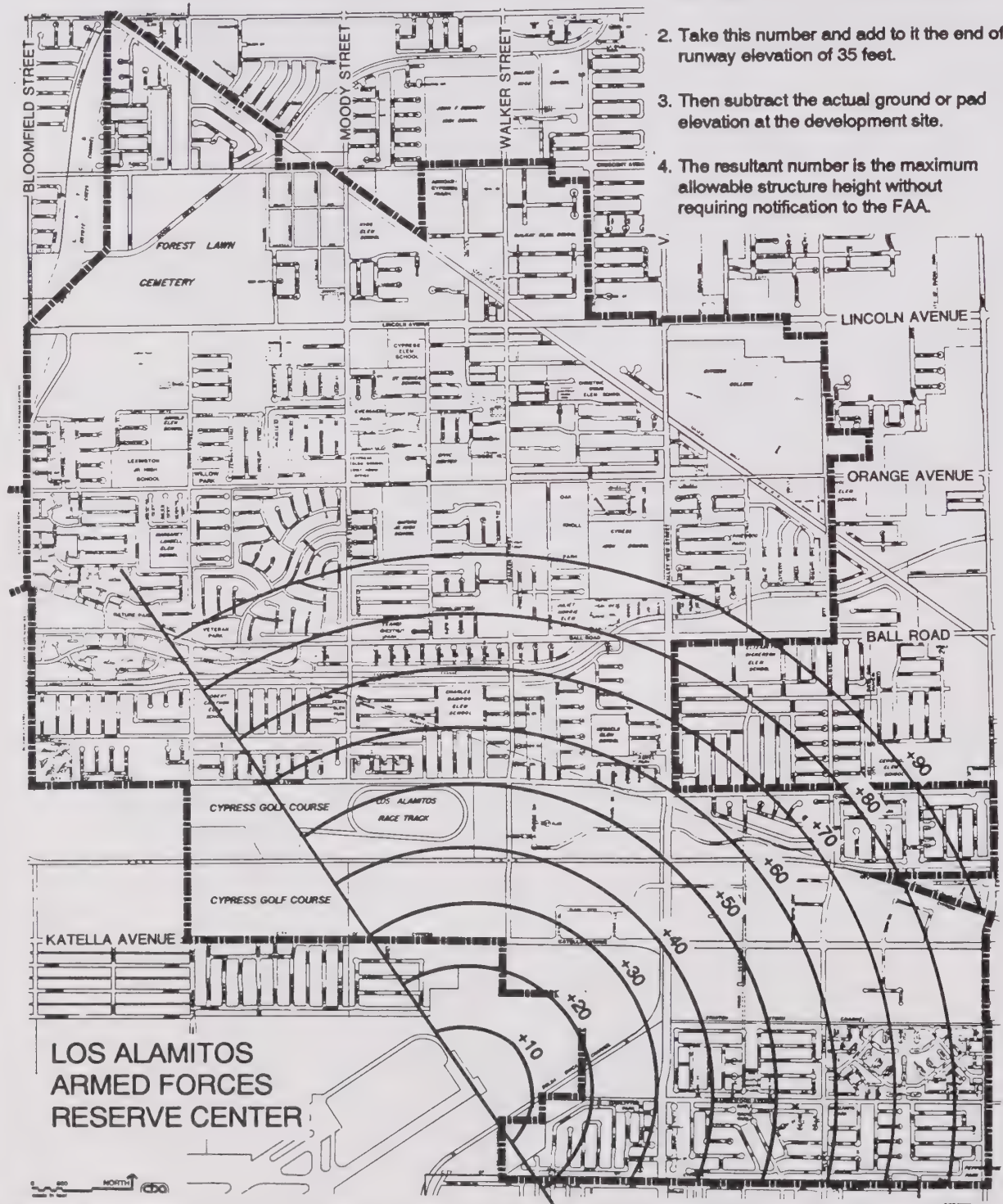
Good Neighbor: One "neighbor" each month is recognized as a "Good Neighbor" by the Cypress Police Department. This honor is received by someone who has contributed information that has lead to solving a crime or a number of other actions.

Aircraft Overflight

The Los Alamitos Armed Forces Reserve Center (AFRC) is located in Central Orange County within the City of Los Alamitos. On-site facilities include two runways and associated taxiways, ramp space, and hangars. The AFRC is primarily utilized for helicopter training missions.

A portion of the City of Cypress lies within the prevailing approach path of the Army Airfield located on the Los Alamitos Armed Forces Reserve Center. This portion of Cypress is primarily composed of business park facilities. Specific land use regulations regarding FAA notification imaginary surfaces, aircraft noise, and building heights have been implemented. (See Figures S-6, S-7 and S-8).

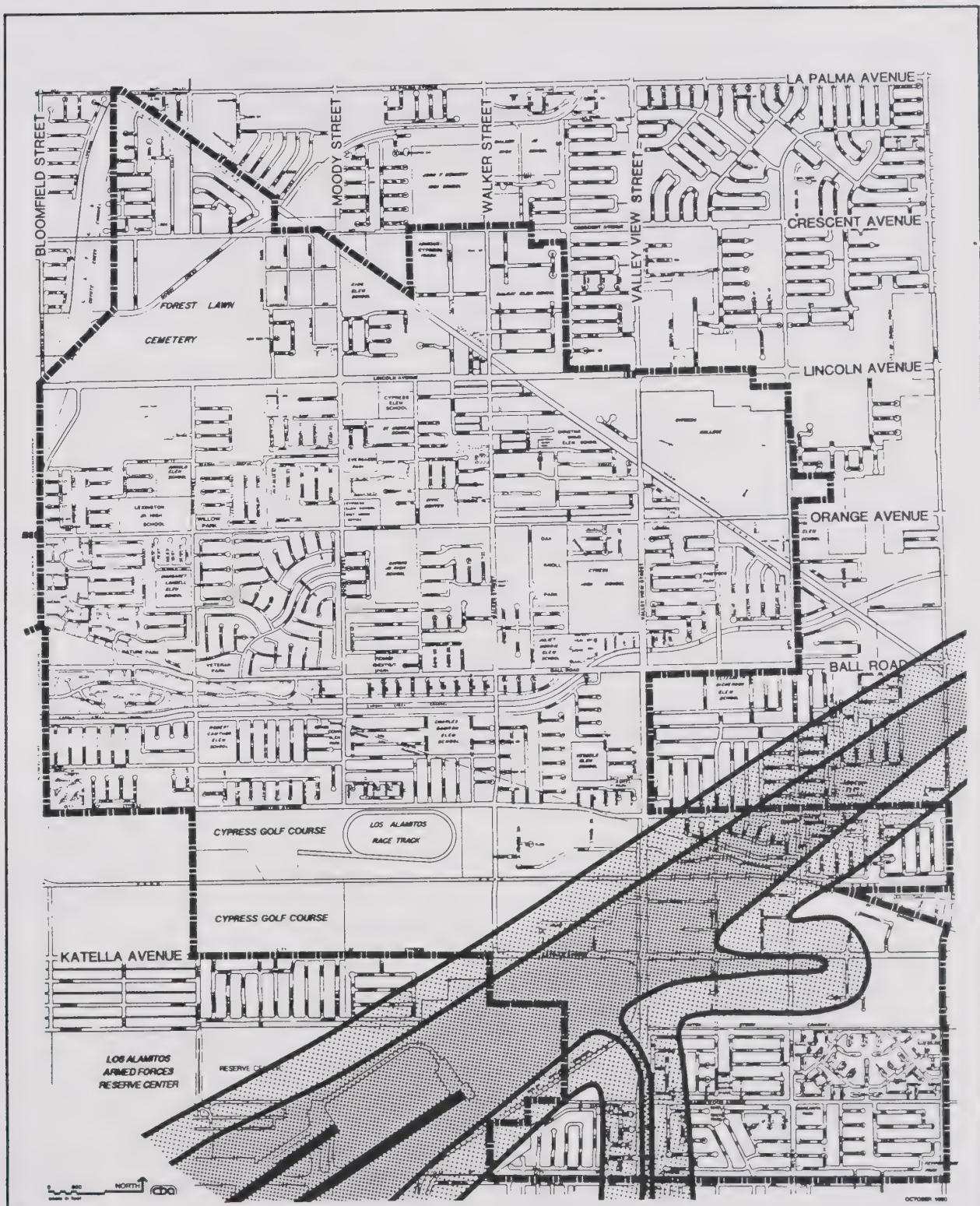
1. Find location of development on the map and make note of what area it is in.
2. Take this number and add to it the end of runway elevation of 35 feet.
3. Then subtract the actual ground or pad elevation at the development site.
4. The resultant number is the maximum allowable structure height without requiring notification to the FAA.



SOURCE: City of Cypress General Plan

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Figure S-6
FAA 100:1 Notification
Imaginary Surfaces



High Noise Impact



Moderate Noise Impact

SOURCE: Airport Land Use Commission for Orange County

CYPRESS
GENERAL PLAN
UPDATE

Figure S-7
Los Alamitos Army Airfield
Impact Zones

-
- LOS ALAMITOS
ARMED FORCES
RESERVE CENTER**
2. Take this number and add to it the end of runway elevation of 35 feet.
 3. Then subtract the actual ground or pad elevation at the development site.
 4. The resultant number is the maximum allowable structure height without requiring approval to the FAA.

CYPRESS

GENERAL PLAN UPDATE

Figure S-8
Building Height Restrictions
50 to 1 Clearance Surface

SAFETY ISSUE IDENTIFICATION

The issues identified below were developed through analysis of the background data contained within the Safety Element. These issues will be utilized to formulate the Element's goals and policies, and the Safety Plan.

FLOODING

- Flood control facilities in Cypress will contain flows resulting from a 100-year flood, according to the Federal Emergency Management Agency. Like the majority of Orange County, Cypress may, however, experience flooding during a 500-year storm or dam failure. Existing flood control facilities in most of Orange County are inadequate to accommodate a 500-year flood.
- Failure of the Prado, Carbon Canyon, or Whittier Narrows dams would result in inundation throughout the City.

SEISMIC

- The Division of Mines and Geology has not identified any active or potentially active faults within the City of Cypress. However, like all of Southern California, the City is situated within a seismically active region. Hazards relating to seismic events, including groundshaking and liquefaction, could endanger structures and people within the area.
- Structures without adequate reinforcement, including masonry and concrete tilt-up buildings constructed prior to 1974, are especially at risk of earthquake damage. The City contains only one masonry structure, and the number of concrete tilt-up structures is unknown. According to the

Building Department, there may be some concrete tilt-up structures within the Business Park area.

HAZARDOUS AND TOXIC MATERIALS

- A number of businesses utilize or store hazardous materials within Cypress. The accidental release or combustion of these hazardous materials could endanger individuals within the community.
- The transportation of hazardous waste poses special problems. While there are no freeways within Cypress, accidents involving hazardous waste would most likely occur on the City's major arterials including Katella, Valley View, and Lincoln Avenues, and on the Southern Pacific Railroad lines. The City could also possibly be subjected to the airborne release of hazardous materials due to its location within the flight pattern of the Los Alamitos Armed Forces Reserve Center.

PIPELINES

- A number of pipelines traverse the City which transport natural gas, crude oil, and oil. (See Figure S-5) Though pipelines have better safety records than many other transportation methods, explosions resulting from pipeline failure may endanger individuals and structures. Pipeline failure most commonly results from excavation and corrosion.

URBAN FIRES

- Additional development in the City will place new demands on Battalion 1 in the Orange County Fire Department.
- The majority of remaining development in the City will occur in the Business Park. Light industrial and R & D

uses in the Business Park may utilize, transport, and/or store chemicals creating a possible fire hazard.

- Wood roofs are often a contributing factor to the spread of urban fires. Cypress does not contain any large residential tracts with wood roofs. However, the City's Disaster Plan does identify the presence of some apartment buildings and single-family homes with wood roofs.

CRIME

- As Cypress' resident and business population continues to grow, the City Police Department will need to service a larger community. Additional demands placed on the Department, without adequate increases in staffing and equipment, limits the Police Department's ability to maintain its current high levels of service.

AIRCRAFT OVERFLIGHT

- A portion of the City of Cypress lies within the prevailing approach path of the Los Alamitos Army Airfield. Air operation accidents including equipment failure or the accidental release of materials may harm individuals within the City.

However, according to the Orange County Safety Element, the relative air safety of the Army Airfield can be partially derived from accident reports maintained by the Los Alamitos Armed Forces Reserve Center. Though minor mishaps causing less than 10,000 dollars in damage to aircraft have occurred on the airfield premises, no accidents have occurred which have resulted in loss of lives or major ground damage in the last ten years.

SAFETY GOALS AND POLICIES

The following goals and policies are designed to protect the public from natural and manmade hazards. These goals and policies will be utilized to develop the plan section of the Safety Element, which outlines specific programs and actions to be implemented.

FLOODING

Flooding hazards may threaten the public safety. Existing flood control facilities in Cypress are anticipated to accommodate 100 year floods, but are not capable of handling a 500 year flood. In addition, outside of Orange County, the Los Angeles County flood control system has been found to be inadequate. The City is also located in the inundation area of three dams.

GOAL 1: Protect residents, workers, and visitors from flood hazards, including dam inundation.

Policy 1.1: Manage development to insure that flooding concerns have been considered prior to development.

Policy 1.2: Minimize flood hazards by working with the Orange County Department of Public Works to identify and construct needed local and regional storm drain improvements.

Policy 1.3: Minimize dam inundation hazards through engineering and construction.

Policy 1.4: Review on an annual basis the emergency evacuation plan to ensure its continued effectiveness.

Policy 1.5: Support the U.S. Army Corp of Engineers improvements to Los Angeles County's flood control system.

SEISMIC

The City of Cypress, like all jurisdictions in Southern California, is located in a seismically active region. The City may therefore be exposed to extreme groundshaking and resulting seismic hazards.

GOAL 2: Protect life and property in Cypress from seismic events and resulting hazards.

Policy 2.1: Identify and evaluate existing structures for structural safety. Encourage building owners to undertake seismic retrofit improvements.

Policy 2.2: Implement the U.B.C.'s seismic standards for construction of new buildings and maintain seismic safety of existing structures.

Policy 2.3: Require the review of soils and geologic conditions, and if necessary onsite borings to determine liquefaction susceptibility of a proposed project site.

Policy 2.4: Study the potential for liquefaction within the City and adopt policies which minimize the potential damage of structures and injury of citizens.

HAZARDOUS MATERIALS

The accidental release of hazardous materials may endanger the public safety. A number of businesses in the community utilize hazardous materials. Hazardous materials may also be transported through the City on arterials, rail lines, and airplanes.

GOAL 3: Minimize risks to life and property associated with the handling, transporting, treating, generating, and storage of hazardous materials.

Policy 3.1: Locate new and relocate existing land uses that utilize, produce, transport, or store hazardous materials a safe

distance from other land uses that maybe adversely affected by such activities.

Policy 3.2: Encourage and support the proper disposal of household waste and waste oil. Monitor dry cleaners, film processors, auto service establishments, and other businesses generating hazardous waste materials to ensure compliance with approved disposal procedures.

Policy 3.3: Prosecute unlicensed dumping of toxic or hazardous materials into the ground or water in Cypress. Increase the fines levied for illegal dumping. Encourage citizens to report dumping when they observe it.

Policy 3.4: Support efforts to enforce State "right to know" laws, which outline the public's right to information about local toxics producers.

PIPELINES

Beneath the City of Cypress, a number of pipelines transport petroleum products and natural gas. If ruptured, these lines may endanger the public safety.

GOAL 4: Minimize property damage and injury to persons from underground pipeline hazards.

Policy 4.1: Ensure that the fire department and other disaster response agencies have access to route, depth, and shut-off information about each pipeline.

Policy 4.2: Ensure that the Disaster Response Plan includes procedures to deal with a pipeline accident.

Policy 4.3: Consult with agencies operating these lines as well as the Public Utilities Commission and the Office of Pipeline Safety of the Department of Transportation to determine the real potential for explosion or rupture in case of accident or earthquake.

Policy 4.4: For new development, maximize building setback from existing pipelines or new/established pipeline routes to a

preferred width of 150 feet where physically feasible, but in no event less than 50 feet. Whenever development is proposed within 150 feet of petroleum pipelines, site plans must clearly show pipeline locations and all measures proposed to mitigate all potential safety hazards.

URBAN FIRES

Urban fires may spread quickly through a community, depending on building materials and other factors. The Orange County Fire Department provides fire protection to Cypress.

GOAL 5: Protect life and property in Cypress from urban fires. Maintain the fire department's high level of service to community businesses and residents.

Policy 5.1: Maintain a response time of five minutes for the first responder engine and provide paramedic service within nine minutes.

Policy 5.2: Evaluate the effects of new development on the fire department's response time. Ensure through the development review process that new development will not result in reduced emergency service levels.

Policy 5.3: Maintain and periodically review procedures for dealing with fire emergencies in the City's Disaster Plan.

Policy 5.4: Establish evacuation routes for an urban fire.

Policy 5.5: Maintain mutual aid agreements with surrounding jurisdictions for fire protection.

Policy 5.6: Provide adequate fire equipment access to structures within the community.

Policy 5.7: Maintain an ongoing fire inspection program to reduce fire hazards associated with older buildings, critical facilities, public assembly facilities, and industrial and commercial buildings.

Policy 5.8: Promote the utilization of fire-safe building materials, and enforce the City's fire sprinkler ordinance.

POLICE PROTECTION

The City has its own Police Department which provides police protection to the community. As the City continues to grow, additional demands are placed on the police department. The Police Department must maintain a high level of service, while accommodating these extra responsibilities.

GOAL 6: Maintain the police department's high quality service to the City.

Policy 6.1: Assess the impacts of incremental increases in development density and the resulting traffic congestion on emergency response time. Ensure through the development review process that new development will not result in reduced emergency service levels.

Policy 6.2: Maintain a response time of approximately three minutes for emergency calls and six minutes to non-emergency calls.

Policy 6.3: Enhance public awareness and participation in crime prevention. Develop new and expand educational programs dealing with personal safety awareness.

Policy 6.4: Promote the use of defensible space (e.g. site and building lighting, visual observation of open spaces, secured areas) in project design to enhance public safety.

Policy 6.5: Continue to support citizen programs that fight crime and promote citizen involvement, such as Neighborhood Watch, DARE, CODES, and Good Neighbor.

AIRCRAFT OVERFLIGHT

A portion of the City of Cypress lies within the prevailing approach path of the Los Alamitos Army Airfield. Air

operation accidents including equipment failure or the accidental release of materials may harm individuals within the City.

GOAL 7: Protect Cypress residents from air operation accidents.

Policy 7.1: Develop criteria to regulate the type and intensity of developments in areas affected by potential air operations hazards.

Policy 7.2: Limit development height within the flight approach to the Los Alamitos Armed Forces Reserve Center to minimize safety hazards to aircraft and protect the airfield.

Policy 7.3: Monitor legislation and regulations established by the Los Alamitos Armed Forces Reserve Center.

Policy 7.4: Establish an emergency response plan for aircraft incidents.

THE SAFETY PLAN

The Public Safety Plan describes the approach to be utilized in implementing the Safety Element goals and policies. The goals and policies of the Element provide direction for specific actions by the City. How Cypress achieves those goals and implements those policies determined by programs, actions, and cooperative efforts sponsored or participated in by the City.

MITIGATION OF FLOODING HAZARDS

The City of Cypress has adequate flood control facilities to accommodate the majority of storms, including a 100 year flood. Therefore, no areas must remain as open space to protect the public safety. The City will support the Orange County Flood Control District to improve the flood control facilities to contain a 500 year flood.

Three dams above the City may inundate portions of Cypress. The City will support structural improvements to these facilities. Evacuation plans described within the Disaster Plan will be implemented upon the failure of these facilities. This Plan will be updated on a continual basis.

MITIGATION OF SEISMIC HAZARDS

A seismic event could endanger workers, residents, and visitors in Cypress. Recent State legislation (Seismic Hazards Mapping Act) was adopted to minimize seismic hazards by identifying seismic hazards study zones and establishing policies to regulate development in these zones. The Department of Mines and Geology is responsible for implementing the Act and is in the process of preparing seismic hazards maps for the entire State. The Department has developed specific criteria for project approvals in seismic hazard zones:

- A project shall be approved only when the nature and severity of the seismic hazards at the proposed site have been evaluated in a geotechnical report and appropriate mitigation measures have been proposed.
- The geotechnical report shall be prepared by a registered civil engineer or certified engineering geologist. The report shall contain site-specific evaluations of the seismic hazard affecting the project and shall identify portions of the project site containing seismic hazards. Any known off-site seismic hazards that could adversely affect the site will also be identified.

Additional policies will be formulated and enforced by Cypress in compliance with the final recommendations prepared by the Department of Mines and Geology.

The City has previously implemented a number of measures to reduce the possible impacts of seismic events. The City will continue to implement U.B.C.'s seismic safety standards regarding the construction of housing and commercial structures. Of particular concern are structures that are not constructed to today's earthquake standards, specifically unreinforced masonry structures and concrete tilt-up structures built prior to 1974. State legislation currently requires cities to identify all unreinforced masonry structures. Cypress has completed its inventory and is working with the owner of the one "at risk" structure to comply with current building code regulations. The City's next priority will be to survey tilt-up structures that are potential hazards to workers and residents.

MITIGATION OF HAZARDOUS MATERIALS ACCIDENTS

The Orange County Hazardous Waste Management Plan was prepared in accordance with the Tanner legislation (AB 2948) to ensure that sufficient hazardous waste facilities are available in California to manage hazardous waste and protect the public health and safety. Cypress has adopted the State approved Orange County Hazardous Waste Management Plan by reference to address hazardous waste issues in the community.

The primary regulatory means of controlling hazardous materials are regulations governing the siting of and conditions imposed upon facilities which handle hazardous materials. The County's Plan contains specific regulations which control these facilities including siting criteria. Table S-1 provides a general description of the County's siting factors and criteria.

Household hazardous waste has increasingly become an issue. As required under State law, the City has prepared its own Hazardous Waste Plan to regulate the handling and disposal of household waste.

The accidental release of hazardous materials would most likely occur at businesses that utilize the chemicals, along transportation routes, or within aircraft flight patterns. Many of the businesses that store or utilize hazardous materials are located in the Cypress Business Park. This area is somewhat separate from most sensitive land uses, such as residential neighborhoods and is in an appropriate location for businesses utilizing, producing, or storing hazardous waste. In addition, the City's setback requirements from streets and the rail lines minimize the damage that may occur from transportation related hazardous waste spills.

Development within the flight pattern of the Los Alamitos Armed Forces Reserve Center are regulated to ensure that land uses are not people intensive, as demonstrated by the City's commitment to prohibiting new residential development in noise impact areas and avoiding excessively tall buildings or large concentrations of people in areas detrimental to the airport. Specific requirements for building height and other possible hazards are examined in Plan section: Mitigation of Aircraft Overflight Hazards.

Structures and individuals within the flight pattern of the Armed Forces Reserve Center could be subjected to the air born release of hazardous materials. Land uses within this flight pattern are regulated to accommodate uses that are not people intensive.

**TABLE S-1
ORANGE COUNTY
HAZARDOUS WASTE FACILITIES SITING FACTORS**

OBJECTIVE	SITING CRITERIA
1. Protect residents	<ul style="list-style-type: none"> ◦ Minimum distance of 2,000 feet between residences and other sensitive land uses. ◦ Consider proximity to immobile populations such as those in schools, hospitals, convalescent homes, jails, and other facilities.
2. Ensure the structural stability and safety of the facility	<p>Avoid locating facility near:</p> <ul style="list-style-type: none"> ◦ 100 year flood zones and flash flood and debris flow areas; ◦ Dam failure inundation areas; and ◦ Active faults (minimum distance of 200 feet). <p>Prohibit residuals repositories and require engineered design safety features for other facilities in areas of potential:</p> <ul style="list-style-type: none"> ◦ Slope instability (unstable soils); and ◦ Subsidence/liquefaction.
3. Protect surface and ground water resources	<ul style="list-style-type: none"> ◦ Avoid locations near aqueducts and reservoirs. ◦ Prohibit facility location within well head protection zone. ◦ Avoid facility location near major aquifer recharge areas (minimum half mile). ◦ Residual repositories and facilities with underground storage prohibited in areas where highest anticipated underlying groundwater elevation is less than five feet from lowest subsurface point of the facility. ◦ Residuals repositories permitted only where uppermost water-bearing zone or aquifer is presently mineralized to extent it cannot be considered for beneficial use.
4. Protect air quality	<ul style="list-style-type: none"> ◦ Facilities in Prevention of Significant Deterioration air quality areas required to submit preconstruction review and apply best available control technology.

**TABLE S-1
ORANGE COUNTY
HAZARDOUS WASTE FACILITIES SITING FACTORS
(continued)**

OBJECTIVE	SITING CRITERIA
5. Protect environmentally sensitive areas	Avoid facility location in: <ul style="list-style-type: none"> ◦ Wetlands; ◦ Proximity to habitats of threatened and endangered species; ◦ Recreational, cultural, and aesthetic resource areas; ◦ Lands with significant mineral deposits; ◦ Military lands.
6. Ensure safe transportation of hazardous waste	<ul style="list-style-type: none"> ◦ Consider proximity to areas of waste generation (waste generation stream). ◦ Locate close distance to waste generation source, except for residuals repositories. ◦ Minimize distance from transportation routes and waste generation sites.
	<ul style="list-style-type: none"> ◦ A facility's fiscal impacts require independent study. ◦ A facility's potential socioeconomic impacts may require independent study. ◦ Facility shall comply with all General Plan, Zoning Ordinance, and other planning requirements.

Source: Orange County Hazardous Waste Management Plan

MITIGATION OF PIPELINES ACCIDENTS

The Transportation Research Board of the National Research Council has published a special report (# 219) entitled Pipelines and Public Safety. The following analysis is taken from that document, pages 66-67.

"Federal regulations prohibit locating liquids pipelines within 50 feet of any private dwelling, industrial building or place of public assembly unless 12 inches of cover are provided, in addition to the three feet normally required over the pipeline. This setback, however, pertains only to the siting of new pipelines. The Federal Housing Administration denies financing for any residential structure located less than 10 feet from the outer boundary of a liquids or gas transmission pipeline easement. Pipeline easements range between 50 and 100 feet, so the effective setback (from the centerline of the pipe) would be between 35 and 60 feet. The setback distance appears to be based on industry practice.

The American Petroleum Institute recently conducted an analysis of the damage radius of liquids pipeline accidents. The analysis showed that 67 percent of the deaths and damage and 75 percent of the injuries caused by liquids pipeline failures took place within 150 feet of the point of discharge. These results could be interpreted to provide support for minimum building setbacks of 150 feet from existing pipelines to provide a good margin of safety."

The Office of Pipeline Safety of the U.S. Department of Transportation is the primary agency responsible for the inspection and maintenance of pipelines running through Cypress. While the City does not have regulatory mandate over these pipelines, it can, however, control land use within the areas most affected by these pipelines.

New development is, therefore, encouraged to maximize building setback from existing pipelines or new/established pipeline routes to a preferred width of 150 feet where physically feasible, but in no event less than 50 feet. Whenever development is proposed within 150 feet of petroleum pipelines, site plans must clearly show pipeline

locations and all measures proposed to mitigate all potential safety hazards.

MITIGATION OF AIRCRAFT OVERFLIGHT HAZARDS

The Airport Land Use Commission is the agency, charged by the State, with the responsibility of formulating a detailed land use plan (known as the AELUP) "to safeguard the general welfare of the inhabitants within the vicinities of airports and to ensure the continued operation of the airports." The Commission's Airport Environs Land Use Plan (AELUP) specifies incompatible land uses for the land area surrounding the Los Alamitos Armed Forces Reserve Center. Generally, this means prohibiting new residential development in noise impact areas and avoiding excessively tall buildings or large concentrations of people in areas detrimental to the operation of the airport.

Cypress lies within the flight pattern of the Army Airfield on the Los Alamitos Armed Forces Reserve Center, and the planning area established by the Airport Land Use Commission (the 100:1 imaginary surface as defined in FAR part 77.13). Portions of the City that are within this area should be regulated to incorporate appropriate land uses. The City of Cypress will prohibit any structure, either within or outside of the planning areas, which is determined to be a "hazard" by the FAA because the proposed structure:

- Would raise the ceiling or visibility minimums at an airport for an existing or planned instrument procedure (i.e., a procedure consistent with the FAA-approved airport layout plan or a proposed procedure formally on file with the FAA);
- Would result in a loss in airport utility, such as causing the usable length of the runway to be reduced;
- Would conflict with the VFR air space used for the airport traffic pattern or enroute navigation to and from the airport.

These regulations will be implemented by the City of Cypress who has land use authority within its jurisdictional bounds. Consequently, interpretation of the above conditions shall be within the City Council's powers.

AGENCY RESPONSIBILITIES AND COORDINATION

Cypress has its own City Police Department and contracts with the Orange County Fire Department for Fire and Paramedic Services. Other agencies which have jurisdiction or which provide public safety services within Cypress include the California Highway Patrol, and the Orange County Health Department. The City coordinates with these agencies to provide the highest level of public safety services.

The City will continue to work with these agencies to ensure adequate service. As part of the Design Review Process, plans for proposed developments, including City projects, will be sent to appropriate agencies for their review and comment. This will occur whether or not an environmental impact report is prepared.

The Southern California Earthquake Preparedness Project (SCEPP) is a state and federally-funded effort to encourage local jurisdictions to prepare for catastrophic earthquakes that may occur in Southern California. SCEPP recommendations have also been approved by the Orange County Board of Supervisors. SCEPP works directly with local governments, private industry, and volunteer groups in a cooperative planning effort. It addresses the full range of earthquake strategies, including mitigation (long term responses), prediction (short term response), emergency actions, and recovery.

EMERGENCY RESPONSE AND ACTION

Each City must have a plan for response to emergency and disaster situations. The City of Cypress has an Emergency Preparedness Plan know as the Cypress Disaster Plan. The Plan establishes response procedures for peace and wartime

disasters. The Plan conforms to the provisions of the California Emergency Preparedness Plan and Emergency Resources Management Plan which apply to city governments.

Emergency Evacuation

The Cypress Disaster Plan designates two routes through the City which are suitable for use as evacuation routes. The extent and severity of a disaster will determine which routes and which directions people must take in order to escape or avoid the afflicted areas. Figure S-9 shows the City's emergency evacuation routes.

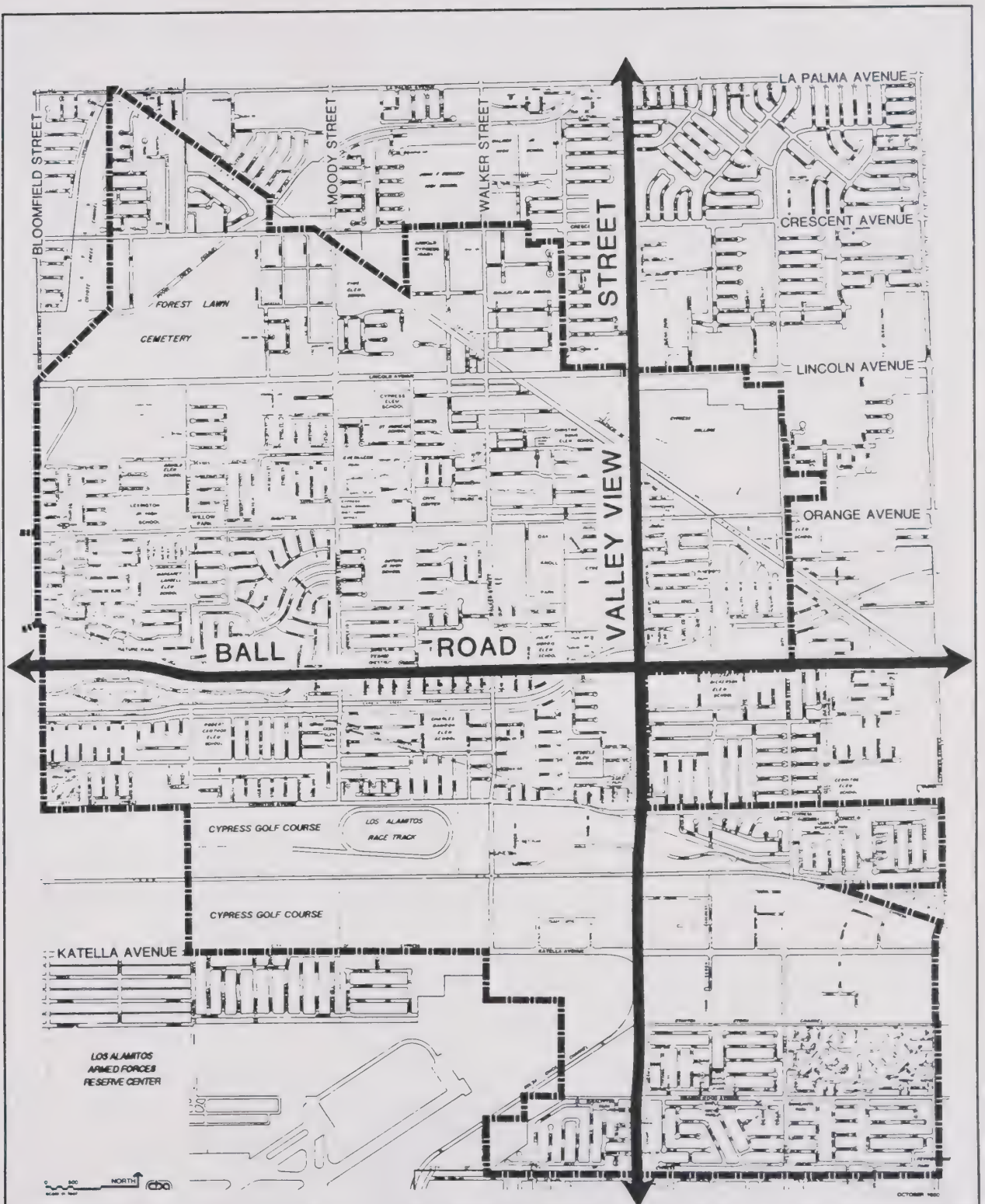
Emergency Response Personnel

The City Police Department and County Fire Department bear most of the responsibility for providing emergency services. In the even of a major disaster, other City, County, and State personnel assume local emergency response roles.

Emergency Shelters

In the event of either a natural or man-made disaster, homes may be destroyed or be inaccessible for extended periods of time. Area residents will need some form of temporary shelter. The City's Recreation and Park district in coordination with the Red Cross, Salvation Army, and state and federal agencies bear the responsibility for providing emergency shelter to displaced residents.

The Cypress Disaster Plan contains an inventory of sites suitable for use as emergency shelters. The site or sites used in a particular emergency depend upon the scope and scale of the emergency and the length of time required to shelter the refugees. Sites most frequently used for shelter are schools, senior centers, community centers, public buildings, and churches.



SOURCE: City of Cypress Disaster Plan 1988.

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Figure S-9
Emergency Evacuation Routes

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Noise Element

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GENERAL PLAN
U P D A T E

CITY OF CYPRESS

GENERAL PLAN

NOISE ELEMENT

FEBRUARY, 1993

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INTRODUCTION

The control of noise is an important part of preserving the quality of a community. The development of effective strategies to reduce excessive noise is essential to creating a safe and compatible living and working environment. Since 1971, the Noise Element has been one of the seven mandatory elements of a general plan.

PURPOSE

The Noise Element of a general plan is a comprehensive program for including noise control in the planning process. It is a tool for achieving and maintaining environmental noise levels compatible with land use. A noise element identifies noise-sensitive land uses and noise sources, and defines areas of noise impact. This Noise Element establishes goals, policies, and programs to ensure that Cypress residents will be protected from excessive noise.

RELATED PLANS AND PROGRAMS

Several local and State laws regulate point source noise and establish standards to protect community residents from excessive noise.

Cypress City Code

The City of Cypress adopted a comprehensive noise ordinance into its City Code which sets standards for noise levels city-wide and provides the means to enforce the reduction of obnoxious or offensive noises. Sections 13-64 through 13-78 of the City Code establish noise standards and enforcement procedures.

State Noise Insulation Standards

Title 25, Section 1092 of the California Code of Regulations sets forth requirements for the insulation of multiple-family residential dwelling units from excessive and potentially harmful noise. The State indicates that locating units in areas where exterior ambient noise levels exceed 65 dBA is undesirable. Whenever such units are to be located in such areas, the developer must incorporate into building design construction features which reduce interior noise levels to 45 dBA CNEL.

SCOPE AND CONTENT OF THE ELEMENT

The Noise Element follows guidelines in the State Government Code Section 65301(f) and Section 46050.1 of the Health and Safety Code. It quantifies the community noise environment by establishing noise exposure contours for both near- and long-term levels of growth and noise-generating activity. The information will become a guideline for the development of goals and policies to achieve noise compatible land uses. This information also identifies baseline noise levels and sources for the identification of local noise ordinance enforcement. The Element is divided into five sections as follows:

Introduction - including a description of the Purpose and Scope of the Element.

Existing noise characteristics - a description of current and projected noise conditions.

Safety Issues Identification - presenting the noise issues in the City that are to be addressed within the Noise Element.

Goals and Policies - defining the goals of the Noise Element and the City's general approach to achieve stated goals.

The Noise Plan - defining strategies that the City will implement to achieve the goals of the Element.

RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS

The Noise Element's relationship to other elements of the General Plan depends upon the nature of the other Element. In the case of the Land Use Element, the relationship arises from the need to locate incompatible uses away from each other when possible. The relationship to the Safety Element works to protect residents, workers, and visitors within the City from being exposed to harmful noise levels. The relationship to the Circulation Element encourages roadways and other transportation systems that efficiently move people and goods, but also transportation systems which do not create serious noise impacts to surrounding land uses. The Housing Element and the Noise Elements work together to assure a housing stock that is well maintained and meets all current noise standards. Finally, the Conservation/Open Space Element and the Noise Element work together to assure that the City is a pleasant place to live and work. Some of the elements are more directly related to noise than others; however, all must work together in an uncontradictory way to achieve a more livable City.

EXISTING NOISE CHARACTERISTICS

This section describes the current and projected noise environments within the City of Cypress. These descriptions are based on an identification of noise sources and noise-sensitive land uses, noise contour maps, and projections of the noise environment at full implementation of the General Plan.

SOURCES OF NOISE

The sources of noise in Cypress fall into four basic categories. These are:

- major and minor arterial roadways;
- trains (from the two Southern Pacific rail lines);
- aircraft overflights (from the Los Alamitos Armed Forces Reserve Center); and
- stationary sources (including industrial and commercial centers).

Each noise source and its impacts on the noise environment of Cypress are summarized in the following paragraphs.

Major and Minor Arterial Roadways

Traffic noise on surface streets is a significant source of noise within the community. The major roadways in the City include: Crescent Avenue, Lincoln Avenue, Orange Avenue, Ball Road, Cerritos Avenue, Katella Avenue, Oranewood Avenue, Bloomfield Street, Denni Street, Moody Street, Walker Street, Valley View, Holder Street, and Knott Street.

Noise levels along roadways are determined by a number of traffic characteristics. Most important is the average daily traffic (ADT). Additional factors include the percentage of trucks, vehicle speed, the time distribution of this traffic, and gradient of the roadway. In general, most of the land uses along the major roadways are commercial, open space, and light industrial. However, there are some single-family and

multi-family areas, as well as public facilities, that are located along many of these roadways.

Train Operations

The City is crossed by two major railroad lines. Train traffic on the two Southern Pacific rail lines that run along the northeastern and southern edge of the City is a relatively minor source of noise within the community due to the low frequency of operation (about two trains per day). These two lines are used by freight trains.

The railroad lines traverse both commercial and residential property. Any residential developments located along these railroad lines will require sound insulation to mitigate noise to an acceptable level.

Aircraft Operations

The Armed Forces Reserve Center Los Alamitos Airfield is located at the southern boundary of the City and is the only airport within the vicinity of Cypress.

The Airfield is primarily a helicopter training base. Approximately 97% of total operations are by helicopters with the remainder being light twin-engine fixed-wing aircraft and occasional operations by transient military and civil support aircraft. Average Airfield operations (takeoffs, landings, touch and go) over the past 9 years amount to 43,447 annually.

Land uses within the Airport Environs Land Use Plan (AELUP) include residential, vacant, agricultural, and business park uses. Figure N-2 shows the existing noise contours which form the boundary of AELUP.

Stationary Sources

There are some commercial and industrial land uses located near residential areas which generate occasional noise impacts. The primary noise associated with these facilities is caused by delivery trucks, air compressors, generators, outdoor loudspeakers, and gas venting. Other significant stationary

noise sources in the City include noise from construction activity, street sweepers, and gas powered leaf blowers.

NOISE-SENSITIVE RECEPTORS

Housing is the most predominant and noise-sensitive land use in Cypress. This land use is considered especially noise-sensitive because (1) considerable time is spent by individuals at home, (2) significant activities occur outdoors, and (3) sleep disturbance is most likely to occur in a residential area. Mixed use developments which include residential uses along major arterials are particularly sensitive uses since they are located in areas where higher noise levels are generated.

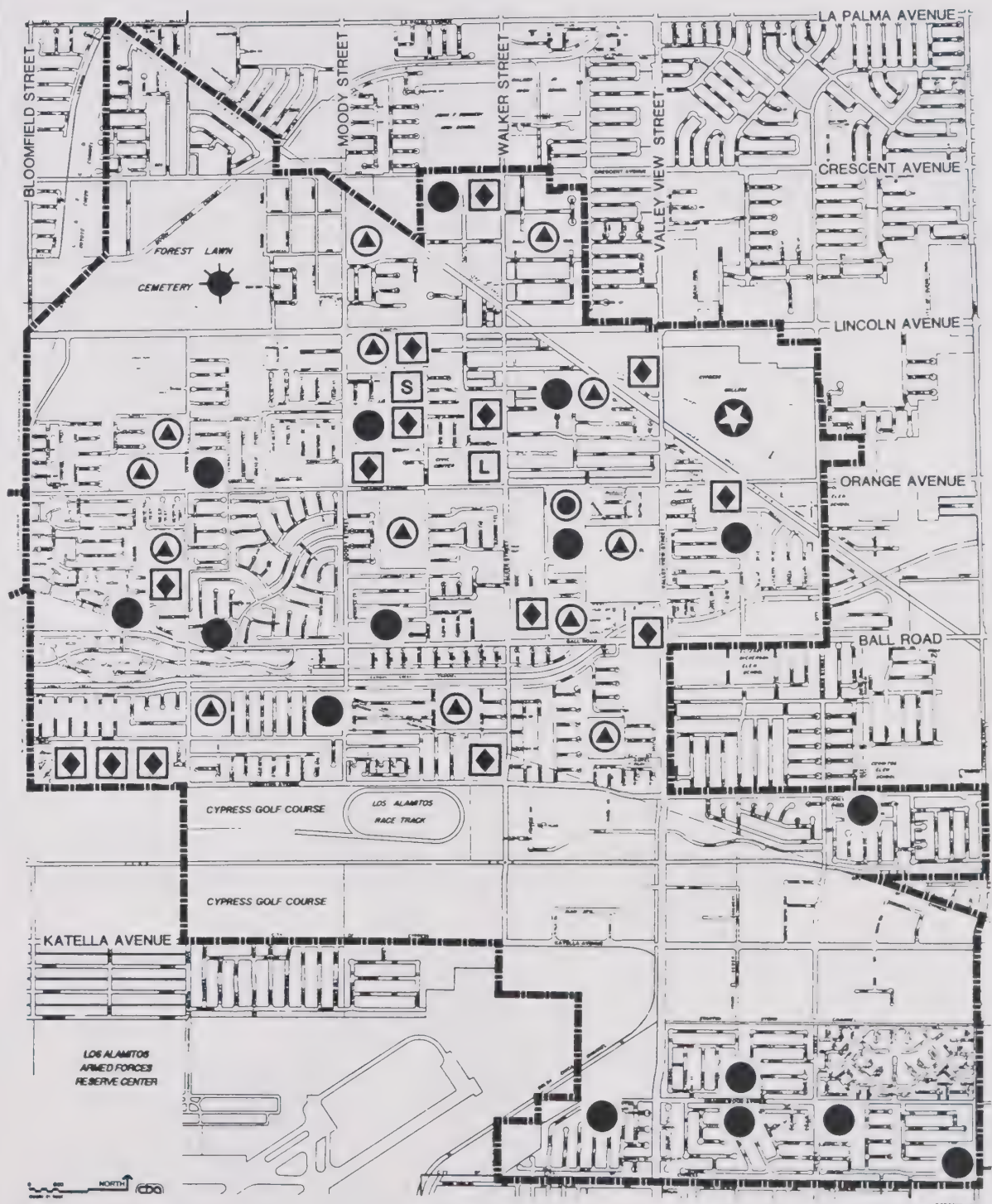
Additionally, the City of Cypress has a number of educational facilities, churches, a library, senior housing, and park and recreation facilities that are considered noise-sensitive. The location of noise sensitive receptors are shown on Figure N-1.

COMMUNITY NOISE CONTOURS

The noise environment for Cypress can be described using noise contours developed for the major noise sources within the City. These contours represent lines of equal noise exposure, just as the contour lines on a topographic map are lines of equal elevation. The contours shown are the 60 and 65 dB CNEL (Community Noise Equivalency Level) contours. CNEL is a 24-hour time-weighted average noise level where noise which occurs during sensitive time periods is weighted more heavily.

Noise contours for Cypress were developed based on existing and future traffic levels, train operations, and other sources of noise in the community.

Cypress noise contours are presented in Figures N-2 and N-3. Figure N-2 shows the noise environment as estimated in 1992 for existing land uses and traffic on major streets in the City. Figure N-3 shows the future noise environment as it would exist at full implementation of the General Plan.



S

"Seniors" Center



Park



School

SOURCE: City of Cypress



Church



Library



College



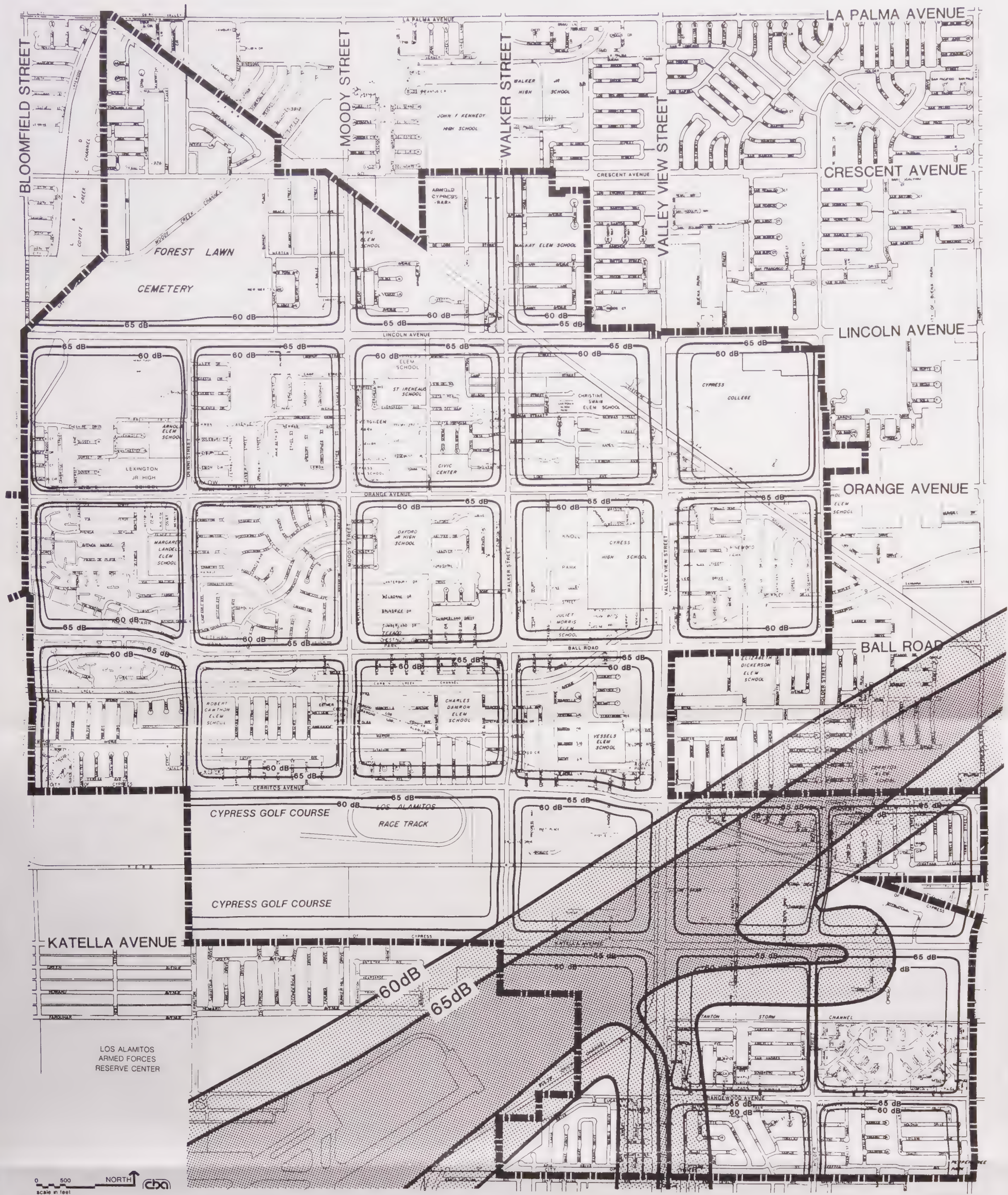
Recreation



Cemetery

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Figure N-1
Noise Sensitive Receptors



OCTOBER 1990

LOS ALAMITOS ARMY AIRFIELD



High Noise Impact

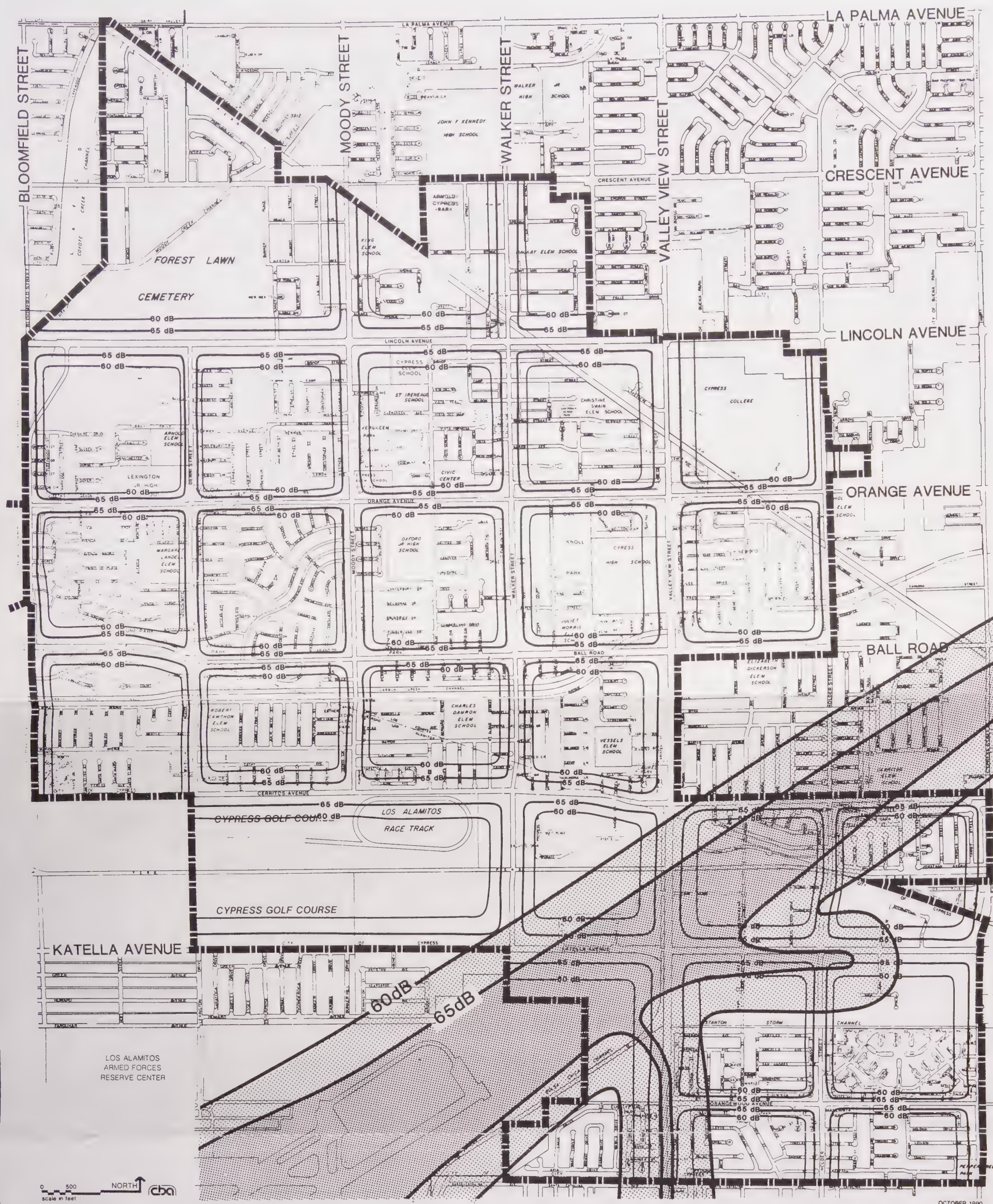


Moderate Noise Impact

SOURCE: Airport Land Use Commission for Orange County,
Cotton/Beland/Associates, Inc., 1992

CYPRESS GENERAL PLAN UPDATE

Figure N-2
Existing Noise Contours



- LOS ALAMITOS ARMY AIRFIELD
- High Noise Impact
 - Moderate Noise Impact

SOURCE: Airport Land Use Commission for Orange County,
Cotton/Beland/Associates, Inc., 1992

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Figure N-3
Future Noise Contours

The inclusion of an area within a 60 or 65 CNEL contour on Figure N-2 or N-3 indicates that noise levels are high enough to be of potential concern, but does not imply that excessive noise levels are present uniformly on all sites within the area. Buildings, walls, berms, and changes in topography affect noise levels. Some locations may be screened from noise impact by the presence of one or more of these features.

Figure N-3 shows 60 dB contours approximately 250 feet from the roadways and the 65 dB contours 100 feet. This impacts existing residential neighborhoods. However, Lincoln Avenue's 60 dB noise contour impacts land uses within 400 feet and Valley View Street and Katella Avenue 500 feet. Future residential units constructed along Lincoln Avenue will therefore require noise mitigation. Figure N-3 also shows the noise contours for the Los Alamitos Army Airfield which extend over the Cypress Business Park and a residential neighborhood on the City's eastern border.

60 CNEL: The 60 CNEL contour defines the Noise Study Zone. The noise environment for any proposed noise-sensitive land use (for example, single- or multi-family residences, hospitals, schools, or churches) within this zone should be evaluated on a project specific basis. The project may require mitigation to meet City and/or State (Title 24) standards. A site- and project-specific study will be necessary to determine what kinds of mitigation will make the interior building environment acceptable for the given type of land use. Some sites may already be sufficiently protected by existing walls or berms that no further mitigation measures are required.

65 CNEL: The 65 CNEL contour defines the Noise Mitigation Zone. Within this contour, new or expanded noise-sensitive developments should be permitted only if appropriate mitigation measures, such as barriers or additional sound insulation, are included and City and/or State noise standards are achieved. In some instances it may be possible to show that existing walls, berms, or screening may exist such that required mitigation is already in place.

Through implementation of noise/land use compatibility standards in this Element, the City may choose to discourage some types of noise-sensitive land uses in these areas, including hospitals, libraries, schools, auditoriums, churches, and concert halls, rather than to require mitigation measures.

NOISE ISSUE IDENTIFICATION

Several factors contribute to create noise issues within the City. These issues are summarized below.

TRANSPORTATION NOISE CONTROL

The City of Cypress contains several transportation-related noise sources, including railroad operations, Armed Forces Reserve Center, major arterials, and collector roadways. These sources are the major contributors of noise in Cypress. Cost-effective strategies to reduce their influence on the community noise environment are an essential part of the Noise Element.

NOISE AND LAND USE PLANNING INTEGRATION

Information relative to the existing and future noise environment within Cypress should be integrated into future land use planning decisions. The Element presents the noise environment in order that the City may include noise impact considerations in development programs. Noise and land use compatibility guidelines are presented, as well as noise standards for new developments.

COMMUNITY NOISE CONTROL FOR NON-TRANSPORTATION NOISE SOURCES

Residential land uses and areas identified as noise-sensitive must be protected from excessive noise from non-transportation sources including commercial and industrial centers. These impacts are best controlled through effective land use planning and the application of the comprehensive City Noise Ordinance.

NOISE GOALS AND POLICIES

The following goals and policies provide the primary directions for the City of Cypress for the effective control of community noise.

TRANSPORTATION NOISE CONTROL

In those areas where transportation noise represents a threat to the public health and welfare, the City will reduce noise hazards to safe levels. In those areas where transportation noise degrades the environment, but not to an extent that represents an immediate hazard to public health and welfare, the City will reduce environmental degradation as much as possible within the limits presented.

GOAL 1.0: Reduce noise impacts from transportation noise sources.

Policy 1.1: Require construction of barriers to shield noise-sensitive uses from excessive noise.

Policy 1.2: Ensure the inclusion of noise mitigation measures in the design of new roadway projects in Cypress.

Policy 1.3: Reduce transportation noise through proper design and coordination of new or remodeled transportation and circulation facilities.

Policy 1.4: Enforce City, State, and federal noise standards, especially those for automobile mufflers and modified exhaust systems.

Policy 1.5: Ensure that the Zoning Ordinance, Circulation Element, and Land Use Element fully integrate the policies adopted as part of the Noise Element.

Policy 1.6: Monitor noise from buses and other heavy vehicles in residential areas. If necessary, consider alternate circulation routes for those types of vehicles.

Policy 1.7: Discourage through-traffic in residential neighborhoods by use of speed bumps and/or one-way streets.

Policy 1.8: Require that new equipment purchased by the City of Cypress comply with noise performance standards.

NOISE AND LAND USE PLANNING INTEGRATION

Noise and land use incompatibilities can be avoided for new developments when noise is properly considered in the planning, design, and permitting of a project. The City desires to prevent future land use and noise conflicts through the planning and approval process.

GOAL 2.0: Incorporate noise considerations into land use planning decisions.

Policy 2.1: Establish targeted limits of noise for various land uses throughout the community, in accordance with Table N-2.

Policy 2.2: Ensure acceptable noise levels near schools, hospitals, convalescent homes, churches, and other noise-sensitive areas, in accordance with Table N-1.

Policy 2.3: Establish standards for all types of noise not already governed by local ordinances or preempted by State or federal law.

Policy 2.4: Require noise-reduction techniques in site planning, architectural design, and construction where noise reduction is necessary.

Policy 2.5: Discourage and, if necessary, prohibit the exposure of noise-sensitive land uses to noisy environments.

GOAL 3.0: Minimize noise spillover from commercial uses into nearby residential neighborhoods.

Policy 3.1: Enforce the 65 db(A) State standard for exterior noise levels for all commercial uses.

Policy 3.2: Require that a minimum of 15 feet be landscaped as a buffer between a commercial or mixed use structure and an adjoining residential parcel.

Policy 3.3: Require that automobile and truck access to commercial properties located adjacent to residential parcels be located at the maximum practical distance from the residential parcel.

Policy 3.4: Prohibit truck deliveries within the City to commercial and industrial properties abutting residential uses before 7 a.m. and after 9 p.m. unless there is no feasible alternative.

GOAL 4.0: Minimize the noise impacts associated with the development of residential units above ground floor commercial uses in mixed use developments.

Policy 4.1: Require that commercial uses developed as part of a mixed use project (with residential uses) not be noise-intensive.

Policy 4.2: Require that mixed use structures be designed to prevent transfer of noise and vibration from the commercial to the residential use.

Policy 4.3: Orient mixed use residential units away from major noise sources.

Policy 4.4: Locate balconies and openable windows of residential units in mixed use projects away from the primary street and other major noise sources.

NON-TRANSPORTATION NOISE CONTROL

The continued enforcement of the comprehensive noise ordinance will improve control of non-transportation noise impacts, and will also assist the City in preserving the low noise levels which exist in some residential areas.

GOAL 5.0: Develop measures to control non-transportation noise impacts.

Policy 5.1: Review the City's existing noise ordinance and revise as necessary to better regulate noise-generating uses.

Policy 5.2: Continue to enforce the Noise Ordinance and make the public more aware of its utility.

Policy 5.3: Where possible, resolve existing and potential conflicts between various noise sources and other human activities.

Policy 5.4: Reduce noise generated by building activities by requiring sound attenuation devices on construction equipment.

Policy 5.5: Establish and maintain coordination among the agencies involved in noise abatement.

THE NOISE PLAN

In order to achieve the goals and objectives of the Noise Element, an effective implementation program is necessary. The underlying purpose is to reduce the number of people exposed to excessive noise and to minimize the future effect of noise in the City. The following are the strategies that the City should consider implementing to control the impacts of noise in Cypress.

NOISE CONTROL

Transportation noise is the most serious noise problem in Cypress. However, local government has little direct control of transportation noise at the source. State and federal agencies have the responsibility to control vehicle noise emission levels. The most effective method the City has to mitigate transportation noise is by reducing noise impact on the community. Mitigation through site planning and the design and construction of a noise barrier (generally a wall or berm) are the most common ways of alleviating traffic noise impacts in existing urban environments. Figure N-4 illustrates some of these techniques.

Tables N-1 and N-2 show standards and criteria that specify acceptable limits of noise for various land uses throughout Cypress. These standards and criteria will be incorporated into the land use planning process to reduce future noise and land use incompatibilities. Table N-1 presents criteria used to assess the compatibility of proposed land uses with the noise environment. These criteria are the basis for the development of the specific noise standards presented in Table N-2 and represent City policies related to land uses and acceptable noise levels. These tables are the primary tools which allow the City to ensure integrated planning for compatibility between land uses and outdoor noise. However, given the overriding need for additional housing in Cypress and the scarcity of available sites in non-noise impacted areas, development of residential uses in high noise areas may sometimes

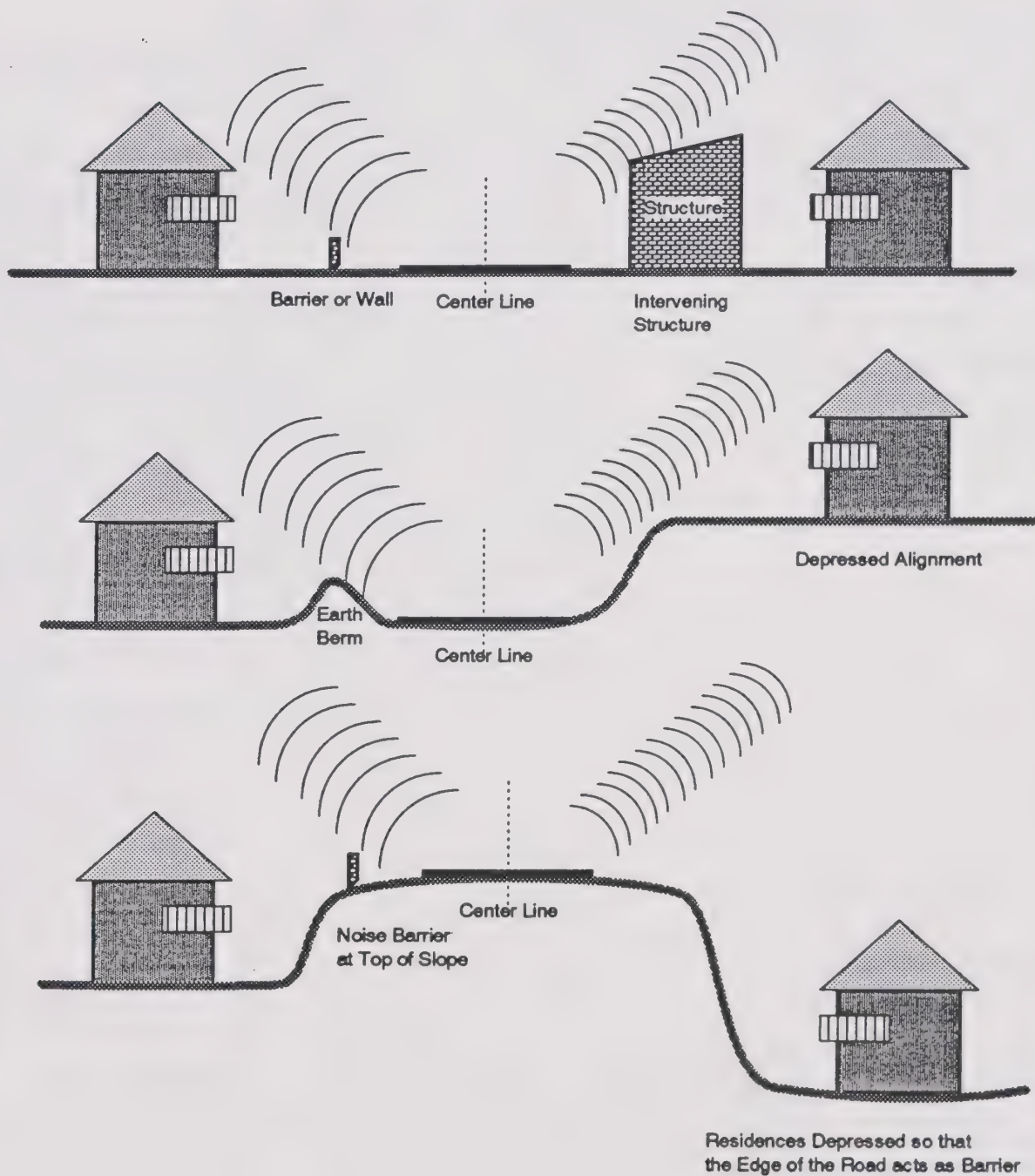


Figure N-4
Examples of a Noise
Barrier Effect

**TABLE N-1
NOISE/LAND USE COMPATIBILITY MATRIX**

Land Use Category	Community Noise Exposure Ldn or CNEL, dB						
	55	60	65	70	75	80	85
Residential- Low Density Single Family, Duplex, Mobile Homes	[Dotted]	[Diagonal]	[Cross-hatch]	[Solid Black]			
Residential- Multiple Family	[Dotted]	[Diagonal]	[Cross-hatch]	[Solid Black]			
Transient Lodging- Motels, Hotels	[Dotted]	[Diagonal]	[Cross-hatch]	[Solid Black]			
Schools, Libraries, Churches, Hospitals, Nursing Homes	[Dotted]	[Diagonal]	[Cross-hatch]	[Solid Black]			
Auditoriums, Concert Halls, Amphitheaters	[Diagonal]	[Diagonal]	[Diagonal]	[Solid Black]			
Sports Arenas, Outdoor Spectator Sports	[Diagonal]	[Diagonal]	[Diagonal]	[Diagonal]	[Solid Black]		
Playgrounds, Neighborhood Parks	[Dotted]	[Dotted]	[Dotted]	[Dotted]	[Cross-hatch]	[Solid Black]	
Golf Courses, Riding Stables, Water Recreation, Cemeteries	[Dotted]	[Dotted]	[Dotted]	[Dotted]	[Cross-hatch]	[Solid Black]	
Office Buildings, Business, Commercial and Professional	[Dotted]	[Dotted]	[Dotted]	[Diagonal]	[Cross-hatch]	[Solid Black]	
Industrial, Manufacturing, Utilities, Agriculture	[Dotted]	[Dotted]	[Dotted]	[Dotted]	[Diagonal]	[Cross-hatch]	[Solid Black]



Normally Acceptable

Specified land use is satisfactory, based on the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.



Conditionally Acceptable

New construction or development should be undertaken only after detailed analysis of noise reduction requirements is made and needed noise insulation features are included in design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, is normally sufficient.



Normally Unacceptable

New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.



Clearly Unacceptable

New construction or development should generally not be undertaken.

SOURCE: Cotton/Beland/Associates. Modified from U.S. Department of Housing and Urban Development Guidelines and State of California Standards.

**TABLE N-2
INTERIOR AND EXTERIOR NOISE STANDARDS**

LAND USE CATEGORIES		CNEL	
CATEGORIES	USES	INTERIOR ¹	EXTERIOR ²
RESIDENTIAL	Single Family Duplex, Multiple Family	45 ³	65
	Mobile Home	—	65 ⁴
COMMERCIAL INDUSTRIAL INSTITUTIONAL	Hotel, Motel, Transient Lodging	45	—
	Commercial Retail, Bank, Restaurant	55	—
	Office Building, Research and Development, Professional Offices, City Office Building	50	—
	Amphitheater, Concert Hall, Auditorium, Meeting Hall	45	—
	Gymnasium (Multipurpose)	50	—
	Sports Club	55	—
	Manufacturing, Warehousing, Wholesale, Utilities	65	—
	Movie Theaters	45	—
INSTITUTIONAL	Hospital, Schools' classroom	45	65
	Church, Library	45	—
OPEN SPACE	Parks	—	65

1. Indoor environment including: Bathrooms, toilets, closets, corridors
2. Outdoor environment limited to: Private yard of single family
Multi-family private patio or balcony which is served by a means of exit from inside the dwelling
Balconies 6 feet deep or less are exempt
Mobile home park
Park's picnic area
School's playground
3. Noise level requirement with closed windows. Mechanical ventilating system or other means of natural ventilation shall be provided as of Chapter 12, Section 1205 of UBC.
4. Exterior noise levels should be such that interior noise levels will not exceed 45 CNEL.

be necessary, and will be attenuated to the greatest extent feasible through site and building design features.

The noise levels presented in Table N-1 represent exterior noise levels. The primary purpose of the noise compatibility matrix is to identify potential conflicts between proposed land uses and the noise environment. The noise standards, Table N-2, should be consulted for determination of noise compatibility with existing developments.

TRANSPORTATION NOISE CONTROL

The most efficient and effective means of controlling noise from transportation systems is to reduce noise at the source. However, since the City has little direct control over source noise levels because of State and federal preemption (for example, State motor vehicle noise standards and federal air regulations), policies should be focused on reducing the impact of the noise on the community.

The City of Cypress contains several transportation-related noise sources including railroad operations, major arterials, and collector roadways. These sources are the major contributors of noise in Cypress.

Action 1

Ensure the employment of noise mitigation measures in the design of roadway improvement projects consistent with funding capability. Support efforts by the California Department of Transportation and other agencies to provide for acoustical protection of existing noise-sensitive land uses affected by these projects.

Action 2

Require the use of walls and landscape berms in the design of residential and other noise-sensitive land uses that are adjacent to major roads, railroads, Los Alamitos Armed Forces Reserve Center, commercial uses, or industrial areas.

Action 3

Provide for continued evaluation of truck movements and routes in the City to provide effective separation from residential and other noise-sensitive land uses.

Action 4

Enforce the State motor vehicle noise standards for cars, trucks, and motorcycles.

NOISE AND LAND USE PLANNING INTEGRATION

Information relative to the existing and future noise environments within Cypress should be integrated into future land use planning decisions. The Element presents the existing and future noise environments so that the City will include noise impact considerations in development programs. Noise and land use compatibility guidelines are presented, as well as noise standards for new developments. Community noise considerations are to be incorporated into land use planning to the maximum extent feasible. These measures are intended to prevent future noise and land use incompatibilities.

Action 5

Enforce standards that specify acceptable noise limits for various land uses throughout the City. Table N-1 shows criteria used to assess the compatibility of proposed land uses with the noise environment. These criteria are the basis of specific noise standards. These standards, presented in Table N-2, define City policy related to land uses and acceptable noise levels.

Action 6

Incorporate noise-reduction features during site planning to mitigate anticipated noise impacts on affected noise-sensitive land uses. The noise referral zones identified by 60 and 65 decibel CNELs in Figures 2 and 3 can be used to identify locations of potential conflict. New developments will be permitted only if appropriate mitigation measures are included such that the standards contained in this Element are met in accord with Table N-2.

Action 7

Enforce the provisions of the current State of California Uniform Building Code, which specifies that the indoor noise levels for multi-family residential living spaces not exceed 45 dB CNEL due to the combined effect of all noise sources. The State requires special construction features to be incorporated within project design to attain this interior noise stan-

dard when the outdoor noise levels exceed 65 dB CNEL. The Noise Referral Zones (the 65 dB CNEL contour) can be used to determine when this standard needs to be addressed. The Uniform Building Code requires that "interior" CNEL/LDN with windows closed, attributable to exterior sources shall not exceed an annual CNEL or LDN of 45 dB in any habitable room. The code requires that this standard be applied to all new hotels, motels, apartment houses, and dwellings other than detached single-family dwellings. The City will also apply this standard to single-family dwellings.

Action 8

Coordinate all land use planning and design efforts in the environs of Los Alamitos Armed Forces Reserve Center to be consistent with noise levels for the airport. Noise sensitive land uses should be prohibited inside the 65 CNEL contour projected for the airport and all noise sensitive land uses inside the 60 CNEL contour should be designed to mitigate airport noise.

NON-TRANSPORTATION NOISE CONTROL

People must be protected from excessive noise from non-transportation sources, including commercial and industrial centers. These impacts are most effectively controlled through the application of the City's Noise Ordinance. Basic standards of the ordinance are shown in Table N-3.

**TABLE N-3
NOISE ORDINANCE STANDARDS**

NOISE ZONE	EXTERIOR STANDARD	INTERIOR STANDARD
1	55 dB(A) 7 am-10 pm 50 dB(A) 10 pm - 7 am	55 dB(A) 7 am-10 pm 45 dB(A) 10 pm - 7 am
2	60 dB(A) 7 am-10 pm 55 dB(A) 10pm - 7 am	55 dB(A) 7 am-10 pm 45 dB(A) 10pm - 7 am

Noise Zone 1: RS-15000 and RS-6000 zoned residential

Noise Zone 2: All other residential properties

Action 9

Enforce the comprehensive City Noise Ordinance. The ordinance will protect people from non-transportation related noise sources such as music, machinery, pumps, and air conditioners.

Action 10

Require that any proposed development and building projects demonstrate compliance with the City Noise Element and Ordinance prior to project approval. Notify applicants for building permits that include mechanical equipment that this requirement exists.

Action 11

Require construction activity to comply with limits established in the City Noise Ordinance. Ensure adequate noise control measures at all construction sites through provision of mufflers and the physical separation of machinery maintenance areas from adjacent residential uses.

Action 12

Continue the noise enforcement efforts of the City through the Orange County Health Officer acting as the noise control coordinator for the City.

Action 13

Limit delivery hours for commercial and industrial uses with loading areas or docks fronting, siding, bordering, or gaining access on driveways adjacent to noise-sensitive areas. Exemption from this restriction shall be based solely on attaining full compliance with the nighttime noise limits of the noise ordinance.

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U P D A T E

Air
Quality
Element

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CITY OF CYPRESS

GENERAL PLAN

AIR QUALITY ELEMENT

FEBRUARY, 1993

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INTRODUCTION

The State of California has not yet made air quality a mandatory General Plan element. The South Coast Air Quality Management Plan (AQMP) has, however, specified that air quality requirements be included in a jurisdiction's General Plan. The City of Cypress has elected to create a separate Air Quality Element to adequately address relevant new requirements and issues confronting the community.

Until a local jurisdiction brings its General Plan into compliance with the AQMP, project-by-project review by SCAG of "regionally significant" general development projects for conformance with the AQMP will be required. In addition, local government General Plans are also subject to AQMP conformity review. After a local government updates its Plan to be consistent with the AQMP, conformity review is limited to an annual cumulative impact review performed in conjunction with the Reasonable Further Progress Report prepared by SCAG and submitted to the EPA. According to the "SCAG Guidance for Implementation of 1989 AQMP Conformity Procedures", local governments must take at least the following actions prior to certifying that their General Plans are in conformance with the AQMP:

1. Adopt an Air Quality Element (or sub-element) that includes objectives consistent with the AQMP and the Air Quality Element Guidelines.
2. Commit to implement the appropriate local government measures identified in the Guidelines and the AQMP.
3. Adopt any necessary changes to other portions of the General Plan to make them internally consistent with the newly adopted Air Quality Element.
4. Approve a schedule and assign staff responsibilities for implementing the adopted local air quality objectives consistent with the AQMP and the Guidelines.

issues on a regional basis. The Plan includes growth management, demand management, system management, and facilities development strategies to recapture and retain the transportation mobility levels of 1984 in the SCAG region. The Regional Mobility Plan is adopted with the AQMP, and its measures are included within the AQMP.

SCOPE AND CONTENT

Following the introduction, the Cypress Air Quality Element is divided into five sections: existing air quality characteristics, air quality management, air quality issues, goals and policies, and local air quality plan.

Historical climate and air quality levels in Cypress are examined in the existing air quality characteristics section, and efforts towards managing air pollution and new legislation are discussed in the air quality management section. The air quality issues section utilizes information from the previous sections to define issues which ultimately lead to the formulation of goals and policies. The local air quality plan specifically explains how the goals and policies will be achieved and implemented.

RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS

The eight elements which comprise the Cypress General Plan are required by law to be internally consistent. Together, these elements provide the framework for development of those facilities, services, and land uses necessary to address the needs and desires of the City's residents. To ensure that these needs are clearly addressed throughout the General Plan, the elements must be interrelated and interdependent. The relationship between the Air Quality Element and the Land Use, Housing, Circulation, Public Safety, Noise, Growth Management and Conservation/Open Space/Recreation (COSR) Elements is described below.

EXISTING AIR QUALITY CHARACTERISTICS

Air quality conditions in Cypress are influenced by many factors, including the topography, climate, and the number and type of pollution producers. This section examines these issues and historical pollution levels in the community, as compared to state and federal air quality standards.

CLIMATE

Cypress is located within the South Coast Air Basin. This basin is a 6,600 square mile area bounded by the Pacific Ocean to the west with the San Gabriel, San Bernardino and San Jacinto mountains to the north and east. The basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties.

The Pacific Ocean plays an important role in affecting local temperatures. As a result of the fairly narrow spread between the warmest and coldest monthly mean sea surface temperature in southern California coastal waters, the climate in Cypress is modified by the relatively warm ocean in winter and the cooling sea breezes in summer. These breezes also serve to disperse pollutants through the air basin.

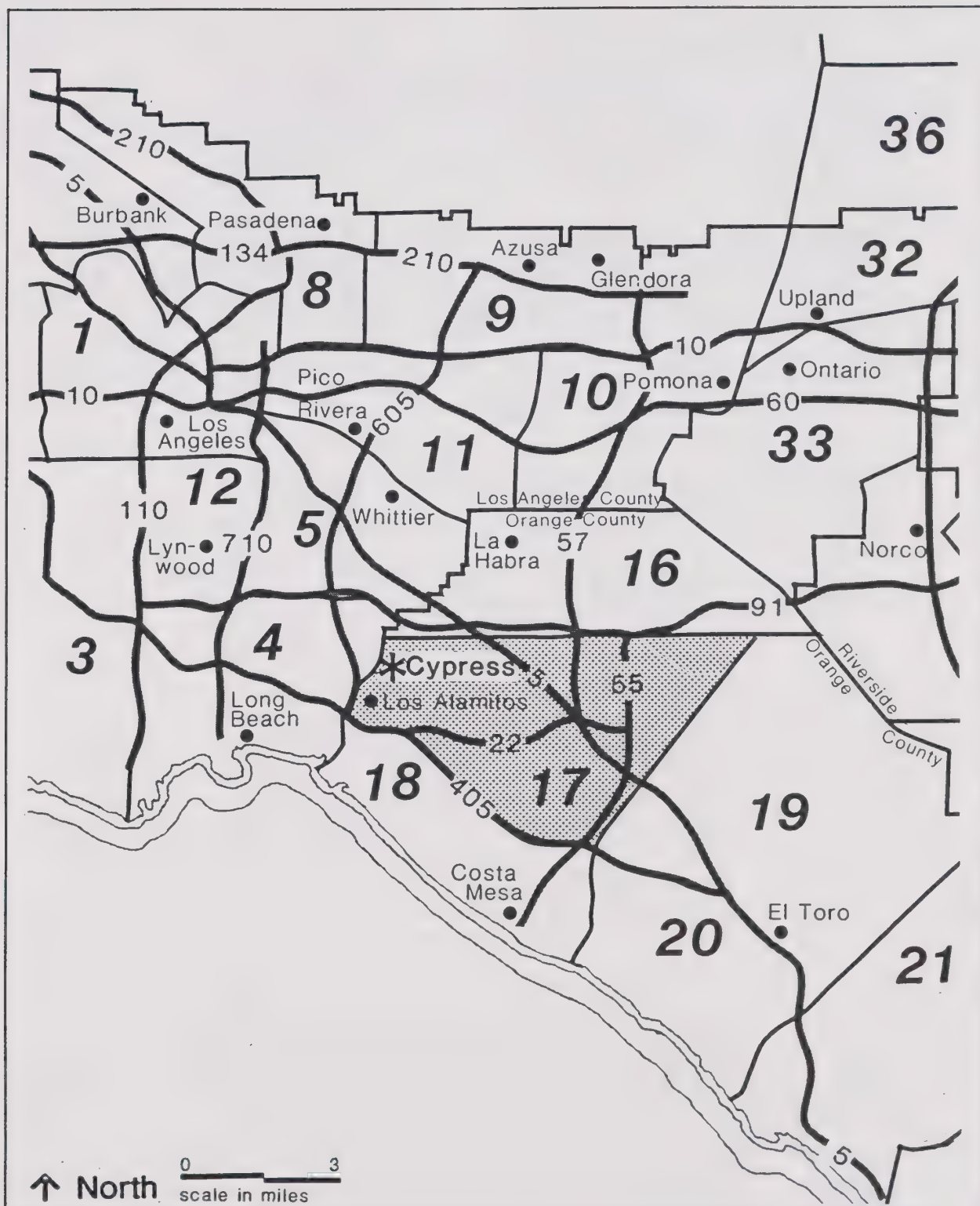
Cypress generally experiences mild summers and short, mild winters with an average July maximum temperature of 79 degrees Fahrenheit and an average January maximum daily temperature of 64 degrees Fahrenheit. The record high and low temperatures have been 108 and 28 degrees Fahrenheit, respectively.

Rainfall data for Cypress has averaged 12 to 13 inches annually with a minimum annual average of 4.4 inches and a maximum annual average of 22.6 inches.

**TABLE AQ-1
AMBIENT AIR QUALITY STANDARDS**

Air Pollutant	State Concentration	Federal	
		Primary	Secondary
Ozone	0.10 ppm, 1-hr. avg.	0.12 ppm, 1-hr. avg.	0.12 ppm, 1-hr. avg.
Carbon Monoxide	9 ppm, 8-hr. avg. 20 ppm, 1-hr. avg.	9 ppm, 8-hr. avg. 35 ppm, 1-hr. avg.	9 ppm, 8-hr. avg. 35 ppm, 1-hr. avg.
Nitrogen Dioxide	0.25 ppm, 1-hr. avg.	0.05 ppm, annual avg.	0.053 ppm, annual avg.
Sulfur Dioxide	0.05 ppm, 24-hr. avg. with ozone > 0.10 ppm, 1-hr. avg. or TSP > 100 ug/cu. m, 24-hr. avg.	0.03 ppm, annual avg. 0.14 ppm, 24-hr. avg.	0.53 ppm, 3-hr. avg.
Total Suspended Particulates (TSP)	N/A	75 ug/cu. m, annual geometric mean 260 ug/cu. m, 24-hr. avg.	60 ug/cu. m, annual geometric mean 150 ug/cu. m, 24-hr. avg.
PM10	50 ug/m ³ , 24-hr	150 ug/m ³ , 24-hr average	50 ug/m ³ annual average
Sulfates	25 ug/cu. m, 24-hr. avg.	N/A	N/A
Lead	1.5 ug/cu. m, 30-day avg.	1.5 ug/cu. m, calendar quarter	1.5 ug/cu. m, calendar quarter
Hydrogen Sulfide	0.03 ppm, 1-hr. avg.	N/A	N/A
Vinyl Chloride	0.10 ppm, 24-hr. avg.	N/A	N/A
Visibility Reducing Particles	In sufficient amounts to reduce the prevailing visibility to less than 10 miles at relative humidity less than 70%, 1 observation.	N/A	N/A

Source: South Coast Air Quality Management District



SOURCE: South Coast Air Quality Management District, 1989

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Figure AQ-1
Air Monitoring Stations

AIR QUALITY MANAGEMENT

Southern California has historically experienced high air pollution levels which contributed to the South Coast Air Basin's exceedence of State and federal air quality standards. Due to the region's generally poor air quality, efforts to monitor and control air pollution have been continuous.

This section examines past and present agencies and programs that regulate air quality levels, and emission producers.

HISTORICAL AIR POLLUTION CONTROL EFFORTS

The seriousness of the local air pollution problem was recognized in the early 1940s. In the mid-1950s, California established the first state agency to control motor vehicle emissions. Countywide or regional air pollution districts were required throughout the state by 1970.

Nearly all control programs developed to date have relied on the development and application of cleaner technology and add-on emission control devices. Sources affected by this technology have been industrial and vehicular. Only recently have efforts been directed at how emission sources are used, for example, the Inspection and Maintenance Program, High-Occupancy Vehicle Lanes (HOV), and mandatory maintenance procedures for industrial sources.

In the 1970s, the inadequacy of local programs to solve a problem that was regional in nature and did not stay within jurisdictional boundaries became apparent at both state and federal levels. Air basins, defined by geographical boundaries, then became the basis for regulatory programs.

In 1976, the California Legislature adopted the Lewis Air Quality Management Act which created the South Coast Air Quality Management District from a voluntary association of air pollution control districts in Los Angeles, Orange, Riverside, and San Bernardino Counties. The new agency was

standards. In addition, the CCAA places a number of performance tests before each Plan. The CCAA Plan for Southern California was adopted July 12, 1991. Although the 1989 AQMP is a federal attainment Plan, the CCAA caused the District and SCAG to immediately begin updating the Plan.

In tandem, both the Air Resources Board (ARB) and the District were also busy adopting the first wave of new regulations called for under the 1989 Plan. The last year and a half has witnessed significant regulatory achievements in reducing emissions from mobile and stationary sources and consumer products.

1991 AQMP Revision: The 1991 AQMP addresses CCAA requirements, retains the basic structure of the 1989 AQMP, but also contains several enhancements to the emissions inventory and modeling analyses, and includes improved mobile source strategies. The purpose of the 1991 AQMP Revision is to set forth a comprehensive program that will lead the Basin into compliance with all federal and state air quality standards.

The 1991 AQMP Revision sets forth programs which require the cooperation of all levels of government: local, regional, state, and federal. Each level is represented in the Plan by the appropriate agency/jurisdiction that has the authority over specific emission sources. Accordingly, each agency/jurisdiction is assigned specific planning and implementation responsibilities.

1991 AQMP CONTROL STRATEGY

The 1991 AQMP Revision has developed emissions control strategies for stationary and mobile sources. This strategy is built on the attainment strategy contained in the 1989 AQMP. New data and analytical methods resulted in new information which reinforces the basic strategy adopted in 1989.

Emission control methods have been divided into three tiers, depending upon their readiness for implementation. The three tiers are as follows:

measures. Immediate research and development activities are needed in the areas of solvent reformulation and non-polluting power generation and energy storage. The agencies responsible for ensuring that research and development of Tier II measures occur during the specified period include the CEC, ARB, District and SCAG.

To attain the Tier II reduction targets, numerous agencies in addition to the District will need to develop and follow demanding implementation schedules. These agencies may need to seek additional legal authority and resources to carry out these activities for which they will be responsible.

Achievement of Tier III goals depends on substantial technological advancements and breakthroughs that are expected to occur throughout the next two decades. This requires an aggressive expansion of Tier II research and development efforts. After achieving Tier II targets, Tier III measures must be implemented on an accelerated schedule to achieve attainment as early as feasible.

The District, in conjunction with federal, state, local, and regional agencies, will be responsible for ensuring that Tier III strategies are implemented, and that the emission reduction goals are met. These agencies will need to develop annual work plans and document their progress.

Responsibilities of Governmental Agencies

Federal Agencies: The 1991 AQMP contains seven Tier I control measures aimed at controlling emissions from federally regulated sources including planes, trains, ships, most construction and farm equipment, off-highway vehicles, federal facilities and future OCS (off-shore oil) operations.

EPA will also have the lead in working with other federal agencies to implement some of the AQMP control measures. This will involve working with the Department of Interior to reduce emissions from off-shore oil development, the Department of Defense and Coast Guard to reduce emissions from military aircraft and marine vessel operations, and the FAA to reduce emissions from aircraft engines. In addition, the AQMP calls for the EPA to work with the FHWA and Department of Transportation to ensure that federally funded transportation projects are consistent with the AQMP.

SCAG is responsible for approving the annual RTIP and for determining its consistency with the Regional Mobility Plan (RMP) and the AQMP (the RMP is adopted with the AQMP, and RMP measures are included in the AQMP).

The City of Cypress, as a local government, will be primarily responsible for implementing the transportation and land use measures included in the AQMP and reducing emissions in the areas of energy conservation, dust control, and trip reduction. This may be done, in part, through the adoption of this Air Quality Element as part of the City's General Plan.

Transportation and Land-Use Control Measures

Measures related to transportation and land-use have been identified in the AQMP that need to be addressed at the local government level (i.e. City of Cypress). These measures are generally aimed at reducing the total number of vehicle trips, improving traffic flow, and utilizing clean fuels in motor vehicles. The 1991 AQMP includes twenty-four SCAG Tier I transportation and land use measures.

The goal of the Transportation Control Measures (TCMs) is to influence transportation choices of mode, time of day, or whether to travel. The strategies also address fuel selection and applications of technology to motivate a shift from petroleum-based fuels.

The measures fall into four categories: demand management, system management, facility improvements, and technology-based.

- *Demand management* is the effort to change motorists' behavior, and includes such measures as ridesharing and alternative work schedules.
- *System management* addresses improvements in the transportation system, such as traffic signal synchronization, to make the transportation network function more efficiently.
- *Facility improvements* are capital expenditures for such things as freeway widenings and construction of new facilities to improve traffic flow and reduce congestion.

to reduce energy-related emissions by implementing two major policies:

- Promoting clean energy
- Reducing the demand for energy

The AQMP calls for a significant increase in the use of alternative, cleaner types of energy, relative to the traditional petroleum-based fuels.

Energy conservation provides one of the major avenues for achieving clean air, providing resource diversity, and energy independence. The AQMP relies on the energy savings from future utility programs, building and appliance standards, and local government programs to provide the majority of savings necessary to meet conservation goals proposed in the 1991 AQMP until further program cost-effectiveness can be completed.

The control measures included in the AQMP have been developed for the residential, commercial, and industrial sectors. These control measures are included in the Plan Section of the Air Quality Element.

CONGESTION MANAGEMENT PROGRAM LINKAGE WITH THE AQMP

In 1989, legislation was adopted that requires either county transportation commissions or another designated public agency to adopt a Congestion Management Program (CMP) by December 1, 1991. The primary goal of the CMP is to promote a regional coordinated planning effort to deal with traffic congestion by incorporating Federal, State, and local agencies, businesses, private groups, and environmental interests into the program by conditioning the eligibility to receive the new gas tax subvention on the adoption and implementation of a CMP.

Further, in order to be eligible for the new funding, the City of Cypress must adopt and annually demonstrate an integration and application of CMP requirements into the Land Use decision-making process.

AIR QUALITY ISSUES

The following Section identifies issues that contribute to air pollution in Cypress and the region and specifies regulations which must be implemented to fulfill Air Quality Management Plan requirements.

LAND USE PATTERN

Land use regulations influence the distribution of housing, employment centers, and other land uses within a community. The widespread distribution of different land use sectors affects individuals traveling to various destinations within a community. A substantial amount of air pollution generated can be contributed to automobile trips traveling between these locations.

- New regulations must be implemented to fulfill Air Quality Management Plan requirements. These regulations include trip reduction, jobs/housing balance, point source reduction, efficient land use, and alternate forms of transportation and energy.
- Only those cities and counties (including Cypress) that have adopted a Congestion Management Plan (CMP) and can annually demonstrate an integration and application of CMP requirements into the land use decision-making process will be eligible for State gas tax funding.
- The Cypress Business Park serves as a major employment center within the City, and has contributed to achieving a relative balance between jobs and housing in the City. Locating jobs and housing within close distance creates the opportunity for individuals to choose alternative transportation modes to work, including walking or bicycling.

REDUCE ENERGY CONSUMPTION

The City of Cypress, through conserving its energy resources, will reduce the amount of emissions produced. Energy conservation techniques utilized in residential, commercial, and industrial developments will lessen the City's energy consumption, thereby decreasing pollutants generated from various energy sources. In addition, the utilization of recycled materials will reduce emissions because new products will not have to be produced.

- Energy conservation measures integrated into residential, commercial, and industrial developments will reduce air pollutants generated during energy production.
- Recycling efforts mandated by AB 939 require local jurisdictions to reduce the amount of solid waste produced. Utilization of recycled materials will decrease energy consumption resulting in less pollutants being generated.

Policy 1.5: Encourage the design of commercial areas to foster pedestrian circulation.

Policy 1.6: Create the maximum possible opportunities for bicycles as an alternative transportation mode and recreational use.

Policy 1.7: Cooperate and participate in regional air quality management plans, programs, and enforcement measures.

Policy 1.8: Adopt and implement the required components of the Congestion Management Plan, and continue to work with Orange County on annual updates to the CMP.

TRANSPORTATION

Transportation, especially in single occupant automobiles, has been identified as a primary contributor to the poor air quality conditions in the South Coast Air Basin (SCAB). The following goals and policies aim to encourage residents to utilize alternative modes of transportation.

GOAL 2: Improve air quality by reducing the amount of vehicular emissions in Cypress.

Policy 2.1: Utilize incentives, regulations and/or Transportation Demand Management (TDM) programs in cooperation with other jurisdictions in the South Coast Air Basin to eliminate vehicle trips which would otherwise be made.

Policy 2.2: Utilize incentives, regulations and/or Transportation Demand Management in cooperation with other jurisdictions to reduce the vehicle miles traveled for auto trips which still need to be made.

Policy 2.3: Promote and establish modified work schedules which reduce peak period auto travel.

Policy 2.4: Participate in efforts to achieve increased designation, construction, and operation of High Occupancy Vehicle (HOV) lanes on local freeways.

Policy 3.1: Adopt incentives, regulations, and/or procedures to minimize particulate emissions from unpaved roads, agricultural uses, and building construction.

REDUCE ENERGY CONSUMPTION

Minimizing the amount of energy utilized directly influences air quality conditions within the region because energy production processes generate pollutants. Energy resources can be preserved through the implementation of conservation measures and recycling efforts.

GOAL 4: Reduce emissions through reduced energy consumption.

Policy 4.1: Promote energy conservation in all sectors of the City including residential, commercial, and industrial.

Policy 4.2: Promote local recycling of wastes and the use of recycled materials.

Policy 4.3: Adopt incentives and regulations to reduce emissions from swimming pool heaters and residential and commercial water heaters.

Measure 1.a - Person Work Reduction

- Local governments, as employers, implement programs to reduce person motor vehicle trips.
- Local governments adopt or amend trip reduction ordinances to require employers to reduce motor vehicle person work trips.
- If the above actions are ineffective, SCAQMD shall expand Regulation XV or adopt new Indirect Source Rule, to reduce the employee-size threshold.

Measure 1.b - Non-Motorized Transportation

- Adoption of work trip reduction programs, local ordinances and regional regulations referred to in Measure 1.a - Person Work Trip Reduction.
- Adoption of non-work trip reduction ordinances and regulations referred to in Measures 2.d - Merchant Transportation Incentives and 2.e - Auto Use Restrictions.
- Local governments include bicycle routes in General Plans that support measures noted above.
- Local governments enact ordinances requiring major new commercial and industrial facilities to provide bicycle parking and showers.
- SCAG will include a regional bicycle plan in 1993 Regional Mobility Plan.

Measure 2.a - Employer Rideshare and Transit Incentives

- Local governments to adopt ordinance/regulation to require facilities with tenants employing more than 100 employees to submit trip reduction plans. (Local governments can adopt one trip reduction ordinance that includes specific individual provisions for Control Measures 1a and 1b. Employers may choose among identified trip reduction options, as long as the target average vehicle ridership is reached within one year of adoption).

Measure 2.d - Merchant Transportation Incentives

- Local government adoption of non-work trip reduction ordinance to require major retail centers to offer customer mode-shift travel incentives and provide facilities for non-motorized transportation needs.
- If necessary, adoption of SCAQMD Indirect Source regulation to require the above.

Measure 2.e - Auto Use Restriction

- Local government to adopt an Air Quality component into each General Plan which will identify, as appropriate, the local applicability of requiring special event centers to operate park-n-ride and off-site facility lots, requiring auto free zones, requiring street closure during peak periods, and enhancing transit performance.
- Local government to adopt a local special event trip-reduction ordinance to require the above for large capacity centers (with over 10,000 seating capacity).
- If necessary and appropriate, adoption of SCAQMD regulations of special events centers tailored to specific circumstances of each center.

Measure 3.a - Truck Dispatching, Rescheduling

- Local governments to adopt Air Quality component in General Plan to alter truck delivery routes and local delivery schedules.
- Adopt local government ordinances and MOUs.
- Develop a truck accident reduction program.
- Adopt a SCAQMD Truck Delivery Rule, if necessary.
- Assess needs for Federal regulation to assist in the implementation of this measure.

relating to VMT reductions attributable to job/housing balance and the implementation of market incentive measures.

In addition to the measures included in the AQMP Plan, all Orange County cities were required to prepare three components of the Congestion Management Plan (CMP) which would facilitate adoption of the countywide CMP in June, 1991. The City of Cypress has developed and adopted the following three mandated components: Transportation Demand Management Ordinance, Level of Service Component, and Capital Improvement Program. In addition to these measures, the five other components outlined below will be created according to assigned time schedules.

1. **Transportation Demand Management:** All jurisdictions must adopt and implement a TDM ordinance that promotes alternative transportation methods. The City of Cypress adopted a Congestion Management Program Transportation Demand Management Ordinance (CDM TDM) and a Cypress Business Park Vehicle Trip Reduction Ordinance, both of which are aimed at reducing the number of single occupant vehicle trips during the peak hours of 6:00 AM and 10 AM, inclusive Monday through Friday. The primary difference is that the CMP TDM applies only to new or expanding development.
2. **Level of Service (LOS):** Traffic Level of Service standards must be established for the CMP Highway System which shall include, at a minimum, all State highways and principal arterials. In Cypress, the principal arterials include Valley View Street, Katella Avenue, and Lincoln Avenue.
3. **Capital Improvement Program (CIP):** A seven-year CIP must be established to maintain or improve LOS and transit performance standards, as well as assist in achieving congestion management and air quality improvement objectives. The City of Cypress has prepared a CIP which includes the following information about 21 planned transportation improvements within Cypress: a project description, funding source, project phase, estimated cost, and program schedule. The majority of these projects are intersection or signal improvements.

- ARB adopts requirement for the installation of liners on truck beds and covering of loads for transportation of particulate matter.
- Local governments to develop a "clean streets" management program which includes adopting construction carryout and entrainment ordinances and vehicle entrainment ordinances, as well as allocating resources for controlling emissions from unpaved areas and storm water control.
- Caltrans and the sanitation districts to participate in the "clean streets" management program by allocating resources for controlling emissions from unpaved areas and storm water control respectively.

Measure 12.b - Unpaved Roads and Parking Lots

- ARB in collaboration with Caltrans to establish criteria to be used in determining which areas need to be paved in the state.
- Amend local government ordinances to require paving of all vehicle maneuvering areas and parking facilities, according to ARB, Caltrans criteria.

ENERGY CONSERVATION

The Air Quality Management District aims at conserving energy by promoting the use of clean energy (solar, etc.) and reducing the overall demand for energy. Specific measures Cypress will implement are listed below.

Residential Sector Measure CM#90 E-D-1A, 1B

This measure proposes additional energy conservation through: (1) increase the thermal integrity of new and existing homes; (2) increase the efficiency of the space conditioning equipment and other major appliances; and (3) decrease the solar gain to homes with air-conditioning using shading strategies such as tree planting.

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CITY OF CYRPESS
GENERAL PLAN UPDATE
GROWTH MANAGEMENT ELEMENT

JUNE 22, 1992

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INTRODUCTION TO THE GROWTH MANAGEMENT ELEMENT

The City of Cypress is a part of the rapidly growing Southern California region. Growth in the City should be compatible with existing transportation infrastructure capacity, and planning and development activities in the City should be coordinated with those of surrounding communities. The broad nature of growth impacts requires that local planning decisions take into account regional issues and be coordinated with State, regional and County planning efforts.

PURPOSE

The primary purpose of this element is to ensure that growth and development are consistent with the City's ability to provide an adequate traffic circulation system pursuant to the Orange County Division, League of California Cities "Countywide Traffic Improvement and Growth Management Plan Component." This element also guides Cypress's participation in interjurisdictional planning efforts and establishes a goal that the provision of jobs and housing be balanced.

SCOPE AND CONTENT

The Growth Management Element contains policies for the planning and provision of traffic improvements that are necessary for orderly growth and development. Presented in this element are policies and programs for the establishment of specific traffic level of service (LOS) standards, development mitigation and development phasing. Also presented are goals and policies related to coordinating and cooperating with other jurisdictions to help manage growth, and goals and policies related to the balance between jobs and housing in the City.

RELATED PLANS AND PROGRAMS

Many federal, state, regional, and Orange County plans and laws affect growth management in the City. Broadly, they include the Orange County Growth Management Plan, the Southern California Association of Governments (SCAG) Growth Management Plan, South Coast Air Quality Management Plan (AQMP), State Assembly Bill 471 (Proposition 111 - Congestion Management), and Measure M (Orange County). Of all of these, Measure M will have the most direct and significant impact upon the City's Growth Management Plan. Each of these plans and/or systems is described below.

Orange County Growth Management Plan Element

The stated purpose of the Orange County Growth Management Plan Element is to ensure that the planning, management and implementation of traffic improvements and public facilities are adequate to meet the current and projected needs of Orange County. The Plan sets forth goals, objectives, policies, and implementation programs for growth management. The goals of the Plan are summarized as follows:

"...to reduce traffic congestion, ensure that adequate transportation facilities, public facilities, equipment and service are provided for existing and future residents and to protect the natural environment of Orange County."

The Plan establishes the following five major policies:

1. **Development Phasing:** Development will be phased according to Comprehensive Phasing Plans (CPPs) adopted by the County. Phasing will be linked to roadway and public facility capacities.
2. **Balanced Community Development:** Development will be balanced to encourage employment of local residents and both employment and employee housing, in the County generally as well as in individual Growth Management Areas (GMAs).

The Orange County Growth Management Plan Element further provides that additional implementation programs may be developed as deemed necessary by the County.

SCAG Growth Management Plan

The SCAG Growth Management Plan recommends ways to redirect the region's growth in order to minimize congestion and better protect the environment. While SCAG has no authority to mandate implementation of its Growth Management Plan, some of the Plan's principal goals (such as improved jobs/housing balance) are being implemented through the South Coast Air Quality Management Plan (AQMD) which the South Coast Air Quality Management District does have the authority to implement.

South Coast Air Quality Management Plan

The South Coast Air Quality Management Plan mandates a variety of measures to reduce traffic congestion and improve air quality, including the Regulation XV Commuter Program which requires employers of more than 100 persons to prepare trip reduction plans, and the requirement that each jurisdiction develop an Air Quality component within its general plan. These and other measures are to be implemented gradually over several years. The City is subject to all AQMP requirements for local jurisdictions.

Assembly Bill 471 (Proposition 111)

Assembly Bill (AB) 471, as subsequently modified by Assembly Bill 1791, requires every urbanized city and county with a population of 50,000 or more, to adopt a Congestion Management Plan (CMP) to reduce traffic congestion. A city or county which does not comply with the CMP requirement will lose gasoline sales tax revenues to which it would otherwise be entitled. Orange County has completed a CMP for its 1991 submittal, which includes the City of Cypress.

CMP requirements include traffic level-of-service (LOS) standards, a trip reduction program, and a seven-year capital improvements program for traffic and transit; Cypress has completed these mandated components. Many of the AB 471 requirements are the same or similar to the requirements of Measure M (discussed below). The County has attempted to reconcile overlapping requirements through the Measure M

PLANNED TRANSPORTATION IMPROVEMENTS

As the City of Cypress and the entire southern California region continue to grow, additional demands will be placed on the transportation network within the City. The following transportation improvements have been identified in the City's Seven-Year Capital Improvements Program to help alleviate future traffic congestion:

Intersection Improvements for:

- Oranewood Avenue/Valley View Street
- Ball Road/Valley View Street
- Cerritos Avenue/Knott Avenue
- Oranewood Avenue/Knott Avenue
- Cerritos Avenue/Bloomfield Street
- Ball Road/Holder Street
- Cerritos Avenue/Walker Street
- Cerritos Avenue/Moody Street
- Katella Avenue/Denni Street

Intersection /Traffic Signal Improvements for:

- Katella Avenue/Meridian Avenue
- Katella Avenue/Siboney Street
- Katella Avenue/Winners Circle
- Katella Avenue/Walker Street
- Walker Street/Executive Drive
- Cerritos Avenue/Denni Street

Traffic Signal Improvements for:

- Walker Street/Railroad Tracks
- Katella Avenue/Tarawa Drive

Signal Interconnect for:

- Valley View Street
- Walker Street
- Cerritos Avenue

The City's Capital Improvement Plan also calls for development of a bypass road at Katella Avenue and Valley View Street (now completed), and acceleration/deceleration lanes at Katella Avenue/Cerritos Avenue/Walker Street.

GROWTH MANAGEMENT ISSUES, NEEDS, OPPORTUNITIES AND CONSTRAINTS

The City of Cypress is part of a large, fast-growing region. During the last decade or so, the pace of new development has begun to outstrip the ability of infrastructure to adequately support that development. The Growth Management Element addresses primarily the issues associated with rapid growth, traffic congestion, and transportation facilities.

- Impacts of growth in adjacent jurisdictions, in portions of the City, and throughout the County have created the need for a regional approach to transportation growth management.
- A significant portion of transportation problems in the County stem from the inadequate capacity of the freeway system to serve peak period travel demands. This lack of capacity results in poor levels of service characterized by severe congestion and low travel speeds during peak hours.
- Arterial highways are intended to handle the bulk of intra-regional traffic and complement the freeway system and local street network. As congestion increases on the freeway, more drivers utilize the arterial system, particularly those that parallel the freeways or those arterials serving the same trip destination as the freeway.

Consequently, arterials such as Valley View Street, Katella Avenue, Knott Street, and Lincoln Avenue are becoming increasingly congested and receive heavy traffic volumes well in excess of their design capacities. This situation is of special concern on those arterials which provide access to the freeway system.

- Traffic congestion in Cypress is as much a regional as it is a local problem. The development which occurs in neighboring jurisdictions and throughout the County affects the freeways and many of the major arterials that traverse the City of Cypress. Thus, it is not possible for the City to fully address growth management issues in isolation from other jurisdictions.

Policy 1.3: All development contributing significant impacts to intersections on the Deficient Intersection List and all projects contributing cumulatively, or individually, 10 percent or more of the traffic using an intersection shall be assessed a mitigation fee determined by the jurisdictions in the GMA and locally administered as part of the City's Capital Improvement Program.

Policy 1.4: Promote traffic reduction strategies through TDM measures adopted by City ordinance.

ADEQUATE TRANSPORTATION FACILITIES

Many of the regional transportation facilities are not adequately sized to accommodate existing and projected growth. Largely in response to this situation, Orange County voters approved Measure M in 1990 to allocate additional funds to provide needed transportation facilities.

GOAL 2: Ensure adequate transportation facilities are provided for existing and future inhabitants of the City.

Policy 2.1: Require that all new development pay its share of the street improvement costs associated with the development, including regional traffic mitigation.

Policy 2.2: New revenues generated from Measure M shall not be used to replace private developer funding which has been committed for any project.

Policy 2.3: The City shall continue to collect Transportation System Improvement Program (TSIP) fees for improvements within its boundaries and shall work with adjacent jurisdictions to determine acceptable impact fees within the growth management areas. These fees may be assessed as necessary in addition to the City's TSIP fees to cover shortfalls that may not be generated by the established fee program.

Policy 2.4: A Deficient Intersection Fund shall be established by the City to make improvements on those intersections

* Not required for Growth Management Element, but required to meet Measure M and CMP requirements.

area as adopted by the Regional Advisory Planning Council and will continue to participate in forums with neighboring or affected jurisdictions to address transportation or other planning issues.

Policy 3.2: The City will continue to cooperate with the County of Orange in annually updating its Congestion Management Plan pursuant to the requirement of AB 471 in order to continue to receive its share of State gasoline sales tax revenues.

JOBS/HOUSING BALANCE

One of the major causes of traffic congestion is land use patterns that hinder the ability of people to live and work in the same area. Long commutes can overburden traffic infrastructure and diminish quality of life. Creating communities where people can both live and work in relatively close proximity shortens commutes and encourages the use of alternative forms of transportation to and from employment.

GOAL 4: Strive to maintain the good balance between jobs and housing in Cypress.

Policy 4.1: To the extent feasible, utilize information on the jobs/housing balance in the City and region as a factor in land use decision-making.

projects except where an increased level of participation exceeding these requirements is established through negotiated legal mechanisms.

The City will work to facilitate coordination of this program through inter-jurisdictional forums in order to determine minimally acceptable impact fees for application within the GMAs. The City will receive credit for existing traffic mitigation fee programs with regard to the GMA base level fee.

COMPREHENSIVE PHASING PROGRAM

The City shall prepare a Comprehensive Phasing Program (CPP) based on OCTA timetables. The purpose of this program is to ensure to the extent feasible that adequate infrastructure (roadways, utilities) is constructed as development occurs by linking the ability of the development to proceed to either construction of the improvement(s) by others, construction of the improvement(s) by the developer, or by the developer's timely provision of the appropriate funding to the City so that the provision of these facilities is in balance with demand.

While the Comprehensive Phasing Program will provide plans for new facilities, the Performance Monitoring Program will provide annual evaluation of compliance with phasing plans in order for development to continue. The Comprehensive Phasing Program shall provide reasonable lead time (three years from first building permit or five years from first grading permit) to design and construct specific transportation improvements.

PERFORMANCE MONITORING PROGRAM

The City shall prepare a Performance Monitoring Program based on OCTA timetables. The Performance Monitoring Program will establish a system for annual evaluation of compliance with newly approved development phasing allocations. Under this program, roadway and other transportation facility improvements or fundings must actually be provided in order for new development to continue.

- Working with interjurisdictional forums (such as the City-County Coordinating Committee) to make sure that the City's fees are consistent with minimally acceptable impact fees for application within the larger Growth Management Area;
- Participating in the Interjurisdictional Planning Forums at the Growth Management Area (GMA) level to discuss implementation of traffic improvements, cooperative land use planning, and appropriate mitigation measures for developments with multi-jurisdictional impacts;
- Working with the interjurisdictional forums to develop strategies for bringing about greater jobs/housing balance at the subregional level;
- Cooperating with the County of Orange in implementing the Facility Implementation Plans and collaborating in the Development Monitoring Program;
- Cooperating with State, County, and local governments in planning and implementing the City's Circulation Element, and coordinating efforts to ensure orderly development; and
- Coordinating population, housing, employment and land use projections with the State Department of Finance, SCAG, the County of Orange Development Monitoring Program, school and water districts.

COMPREHENSIVE DEVELOPMENT PLANS FOR LARGE PROJECTS

As in the past, Cypress will require that any new large developments prepare a Specific Plan and environmental impact analysis. This will allow the City to anticipate the impacts of large projects prior to development of any portion, and permit more time to plan for public services and facilities needed to support the projects.

APPENDIX

DEFINITIONS

For the purpose of this element, the following terms are defined below:

1. **Capital Improvement Program (CIP)** shall mean a listing of capital projects needed to meet, maintain and improve a jurisdictions adopted Traffic Level of Service and Performance Standards. The CIP shall include approved projects and an analysis of the costs of the proposed projects as well as a financial plan for providing the improvements.
2. **Comprehensive Phasing Program (CPP)** shall mean a road and public facilities improvement and financing plan which attains the level of service requirements in this Element. With regard to road improvements, a CPP must include level of service requirements and take into account measurable traffic impacts on the circulation system.
3. **Critical Movement** shall mean any of the conflicting through or turning movements at an intersection which determine the allocation of green signal time.
4. **Development Phasing Program** shall mean a program which establishes the requirement that building and grading permits shall be approved or issued in a manner that assures implementation of required transportation and public facilities improvements. The City shall specify the order of improvements and the number of dwelling units based, at a minimum, on mitigation measures adopted in conjunction with environmental documentation and other relevant factors.
5. **Deficient Intersection Fund** shall mean a trust fund established to implement necessary improvements to existing intersections which do not meet the Traffic Level of Service Policy.
6. **Deficient Intersection List** shall mean a list of intersections that:
 - a) do not meet the Traffic Level of Service Policy for reasons that are beyond the control of the City (e.g., ramp metering

